WSMR 06

DEPARTMENT OF THE ARMY
U.S. ARMY GARRISON WHITE SANDS
100 Headquarters Avenue
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5000

JAN 17 2006

REPLY TO
ATTENTION OF

RECEIVED
JAN 2006
NMED Hazardous
Waste Bureau

Public Works Directorate

Mr. James Bearzi
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Subject: Report Submittal; *2004 Annual Sampling Event HELSTF Groundwater Monitoring Report, November 2005*; IRP Sites WSMR-52 (SWMU 38 and 39), WSMR-54 (SWMU 143) and WSMR-55 (SWMU 154)

Dear Mr. Bearzi:

Enclosed you will find the subject annual groundwater monitoring report (1 print copy w/CD) for Installation Restoration Sites WSMR-52, 54 and 55. The report contains groundwater sampling results for sampling events completed during calendar year 2004. The sampling events occurred in February/March and July/August timeframes. The report includes an attached CD which provides an electronic report copy as well as laboratory analytical data. The report's production was delayed due to a change in our environmental services contract.

A total of 25 monitoring wells are used to monitor groundwater at these sites. Five wells are located at WSMR-52, nine wells at WSMR-54 and eleven wells at WSMR-55. Analytical results are consistent with past results.

The following certification is provided as required by our permit:

> *"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

Copies furnished, with enclosure (1 print copy w/CD), to Ms. Cheryl Frischkorn, NMED-HWB; Mr. Chuck Hendrickson, Region VI EPA; Ms. Stephanie Sigler, U.S. Army Environmental Center; and, without enclosure, to Mr. John Kieling, NMED-HWB; and White Sands Technical Services, LLC.

Should you have any questions regarding this matter, please contact Mr. Jose Gallegos at (505) 678-1007.

Sincerely,

Thomas A. Ladd

Thomas A. Ladd
Director, Public Works

Enclosure

WSMR Environmental Document ES-EC-TO-006-05-082

2004
ANNUAL SAMPLING EVENT

HELSTF Groundwater Monitoring Report

WSMR-52, SWMU 38 and 39;
WSMR-54, SWMU 143;
WSMR-55, SWMU 154

November 2005

EPA ID# NM 2750211235
White Sands Missile Range
Environment and Safety Directorate
White Sands Missile Range, New Mexico 88002

WHITE SANDS TECHNICAL SERVICES

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Service, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.
PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE *(DD-MM-YYYY)* November 2005	**2. REPORT TYPE** Final	**3. DATES COVERED** *(From - To)* Annual 2004
4. TITLE AND SUBTITLE HELSTF Groundwater Monitoring Report 2004 Annual Sampling Event (WSMR-52, SWMU 38 and 39; WSMR-54, SWMU 143; and WSMR-55, SWMU 154)		**5a. CONTRACT NUMBER** W9124Q-04-D-0012 **5b. GRANT NUMBER** **5c. PROGRAM ELEMENT NUMBER**
6. AUTHOR(S) Andrew A. Frye, Sr. Environmental Scientist, Zia Engineering William M. Little, Sr. Engineer, WTS		**5d. PROJECT NUMBER** **5e. TASK NUMBER** TO-04/05/06
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) White Sands Technical Services, LLC P.O. Box 363 WSMR, NM 88002		**5f. WORK UNIT NUMBER** TO-04/05/06 **8. PERFORMING ORGANIZATION REPORT NUMBER**
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Department of the Army U.S. Army White Sands Missile Range 100 Headquarters Avenue ATTN: IMSW-WSM-ES-EC (Jose Gallegos) White Sands Missile Range, NM 88002		**10. SPONSOR/MONITOR'S ACRONYM(S)** **11. SPONSORING/MONITORING AGENCY REPORT NUMBER** ES-EC-TO-001-05-082

12. DISTRIBUTION AVAILABILITY STATEMENT

13. SUPPLEMENTARY NOTES

14. ABSTRACT

This report presents the analytical results of the Feb /Mar and Jul/Aug 2004 groundwater-sampling event at the High Energy Laser Systems Test Facility (HELSTF) Construction Landfills, Chromium Spill and Systemic Diesel Spill Sites.

15. SUBJECT TERMS

MARKS Number: 200-1h
Groundwater, monitoring wells, High Energy Laser Systems Test Facility, HELSTF

16. SECURITY CLASSIFICATION OF:			**17. LIMITATION OF ABSTRACT**	**18. NUMBER OF PAGES**	**19a. NAME OF RESPONSIBLE PERSON**
a. REPORT unclassified	**b. ABSTRACT** unclassified	**c. THIS PAGE** unclassified		18	**19b. TELEPHONE NUMBER (*Include area code)***

HELSTF GROUNDWATER MONITORING REPORT
2004 ANNUAL SAMPLING EVENT
(WSMR-52, SWMU 38 and 39; WSMR-54, SWMU 143; and WSMR-55, SWMU 154)

Submitted to:

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

November 2005

Submitted by:

White Sands Technical Services, LLC
Building 126
White Sands Missile Range, New Mexico 88002

THIS PAGE INTENTIONALLY LEFT BLANK

EXECUTIVE SUMMARY

Numerous Solid Waste Management Units (SWMUs) have been identified at the High Energy Laser Test Facility (HELSTF). The groundwater beneath four of the SWMUs (38, 39, 143 and 154) is routinely monitored for a variety of indicator parameters. This report presents the winter (February/March) and summer (July/August) 2004 sampling results of groundwater monitoring at the four SWMUs.

The indicator parameters, which exceed the New Mexico Water Quality Control Commission (NMWQCC) standards for groundwater during this sampling event are total dissolved solids, chloride, fluoride, nitrate-N, sulfate, arsenic, boron, cadmium, chromium, cobalt, iron, lead, molybdenum, nickel, selenium, strontium, vanadium, 1,1-dichloroethane, 1,1-dichloroethene, benzene, trichloroethene. The following toxic pollutant compounds were also detected: 1-methylnaphthalene -methylnaphthalene, and naphthalene.

Sulfate, boron and selenium are not associated with any release and are believed to be naturally occurring in this region. Total dissolved solids concentrations can be influenced by anthropogenic sources. However, the impact on TDS concentrations of the contamination is limited since the naturally occurring groundwater is relatively high. It is important to note the majority of the water samples have been taken from wells that have total dissolved solids concentrations above 10,000 mg/l. The NMWQCC standards are applicable primarily for water systems with less than 10,000 mg/l of total dissolved solids.

Benzene and free product associated with the systemic diesel spill have declined over time and appear to be relatively stable. There is still a measurable area impacted by free product diesel though smaller than prior to initiation of the interim response measure in 1995.

Chromium, fluoride and trichloroethene (TCE) have been detected in the regional aquifer above NMWQCC standards, though the sources are unknown at this time. TCE has been increasing in concentration in the regional aquifer.

The NMWQCC groundwater exceedances are primarily located in SWMU 143 Chrome Spill Site and SWMU 154 Diesel Spill Site. Several parameters that are being measured for on a semi-annual basis have not been detected in the 2003 and 2004 sampling events in SWMU areas 38 and 39. These specific analyte parameters include: explosives, pesticides and herbicides, semi-Volatile compounds, and petroleum hydrocarbons. If this trend of non-detection continues in 2005 sampling data, these analytes will be recommended for elimination from testing or, at a minimum, the frequency of testing be reduced to one event per calendar year for the above specific parameters.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

Section **Page**

EXECUTIVE SUMMARY ..... **III**

LIST OF ABBREVIATIONS, ACRONYMS, AND SYMBOLS ..... **VII**

1.0 INTRODUCTION **1**

1.1 Site Descriptions 2
1.1.2 SWMUs 38 and 39 – Construction Landfills 3
1.1.3 SWMU 143 – Chromate Spill Site 4
1.1.4 SWMU 154 – Systemic Diesel Spill 5
1.2 Climate 7
1.3 Regional Geology 7
1.4 Hydrogeology 8

2.0 GROUNDWATER MONITORING **9**

3.0 REGULATORY CRITERIA **11**

4.0 GROUNDWATER MONITORING RESULTS **11**

5.0 GROUNDWATER CHEMICAL ANALYTICAL DATA **14**

6.0 SUMMARY **15**

REFERENCES **17**

List of Figures
Figure 1-1. Site Location Map. 2
Figure 1-2. Sampling Locations for SWMUs 38 and 39 3
Figure 1-3. Monitoring Locations for SWMU 143. 5
Figure 1-4. Monitoring Locations for SWMU 154. 6
Figure 1-5. Relief Map Showing Mountain Ranges 7
Figure 1-6. Generalized East-West Cross Section of the Southern Part of the Tularosa Basin, North of Highway 70 (USACE, 1989). 8
Figure 1-7. Location of HELSTF Supply Wells. 9

List of Tables
Table 1-1. Monitoring Locations for SWMUs 38 and 39 3
Table 1-2. Monitoring Locations for SWMU 143 4
Table 1-3. Well Location and Construction Data. 6
Table 2-1. HELSTF Groundwater Monitoring Analyte List. 10
Table 2-2. Additional Analytes for the HELSTF Construction Landfill Monitoring 11
Table 4-1 Field water quality measurements (Winter 2004) 12
Table 4-1a. Corrected Water Level Measurements.(Winter 2004) 12
Table 4-2. Field water quality measurements (Summer 2004) 13
Table 4-2a. Corrected Water Level Measurements (Summer 2004). 13

ATTACHMENT 1
ATTACHMENT 2

APPENDIX A GRAPHS OF ANALYTICAL RESULTS TRENDS
APPENDIX B SAMPLING PROCEDURES
APPENDIX C PURGE AND DECONTAMINATION WATER DISPOSAL
APPENDIX D CHEMICAL ANALYTICAL DATA FALL 2002 SAMPLING EVENT (available on CD only)

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ABBREVIATIONS, ACRONYMS, AND SYMBOLS

Bgs	Below ground surface
DCE	1,1-Dichloroethene
DRO	Diesel Range Organics
EPA	Environmental Protection Agency
FID	Flame Ionization Detector
Ft	Feet
GC	Gas Chromatography
GRO	Gasoline Range Organics
HA	Health Advisory
HELSTF	High Energy Laser Systems Test Facility
HMW	HESLTF Monitoring Well
HPLC	High Performance Liquid Chromatography
ICP-AES	Inductively Coupled Plasma-Atomic Emission Spectroscopy
IRP	Installation Restoration Program
M	Meter
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
mg/L	milligrams per liter equivalent to parts per million
MS	Mass Spectrometry
MTBE	Methyl-tert-butyl-ether
NAD83	North American Datum, 1983
NGVD29	National Geodetic Vertical Datum of 1929
ND	Analyte not detected above reporting limits
NE	No NMWQCC standard is established
NMWQCC	New Mexico Water Quality Control Commission
NR	No results provided
^{o}C	Degrees Celsius
^{o}F	Degrees Fahrenheit
PVC	Polyvinyl Chloride
QC	quality control
RCRA	Resource Conservation and Recovery Act
SM	Standard Methods
SVOC	Semi-volatile Organic Compounds
Std.	Standard unit of measurement
SWMU	Solid Waste Management Unit
TCA	1,1,1-Trichloroethane
TCE	Trichloroethylene
TDS	Total Dissolve Solids
µg/L	micrograms per liter parts per billion
µS/cm	Microsiemens per centimeter
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
VEDRS	Vacuum Enhanced Diesel Recovery System
VOC	Volatile Organic Compounds

THIS PAGE INTENTIONALLY LEFT BLANK

HELSTF GROUNDWATER MONITORING REPORT
2004 ANNUAL SAMPLING EVENT
(WSMR-52, SWMU 38 and 39; WSMR-54, SWMU 143; and WSMR-55, SWMU 154)

1.0 INTRODUCTION

White Sands Missile Range (WSMR) is located in south-central New Mexico. WSMR is the largest land-area military installation in the United States, approximately 99 miles long and 25 to 40 miles wide located in south-central New Mexico. The mission of WSMR is missile development and test programs for the Army, Navy, Air Force, other government agencies, and allied foreign nations.

The High Energy Laser System Test Facility (HELSTF) is located approximately 18.5 miles northeast of the White Sands Main Post, approximately 2.2 miles north of U.S. Highway 70 (see Photograph 1-1 and Figure 1-1). HELSTF became operational in September 1985. The primary mission of the facility has been to support the testing and evaluation of high-energy laser systems, subsystems, components, and materials.

PHOTOGRAPH 1-1. ARIAL PHOTO OF HELSTF.

As a result of historical operations at HELSTF, numerous Solid Waste Management Units (SWMUs) were identified. The groundwater beneath four of the SWMUs (38, 39, 143 and 154) is routinely monitored. This report presents the results of groundwater monitoring at these SWMUs during calendar year 2004.

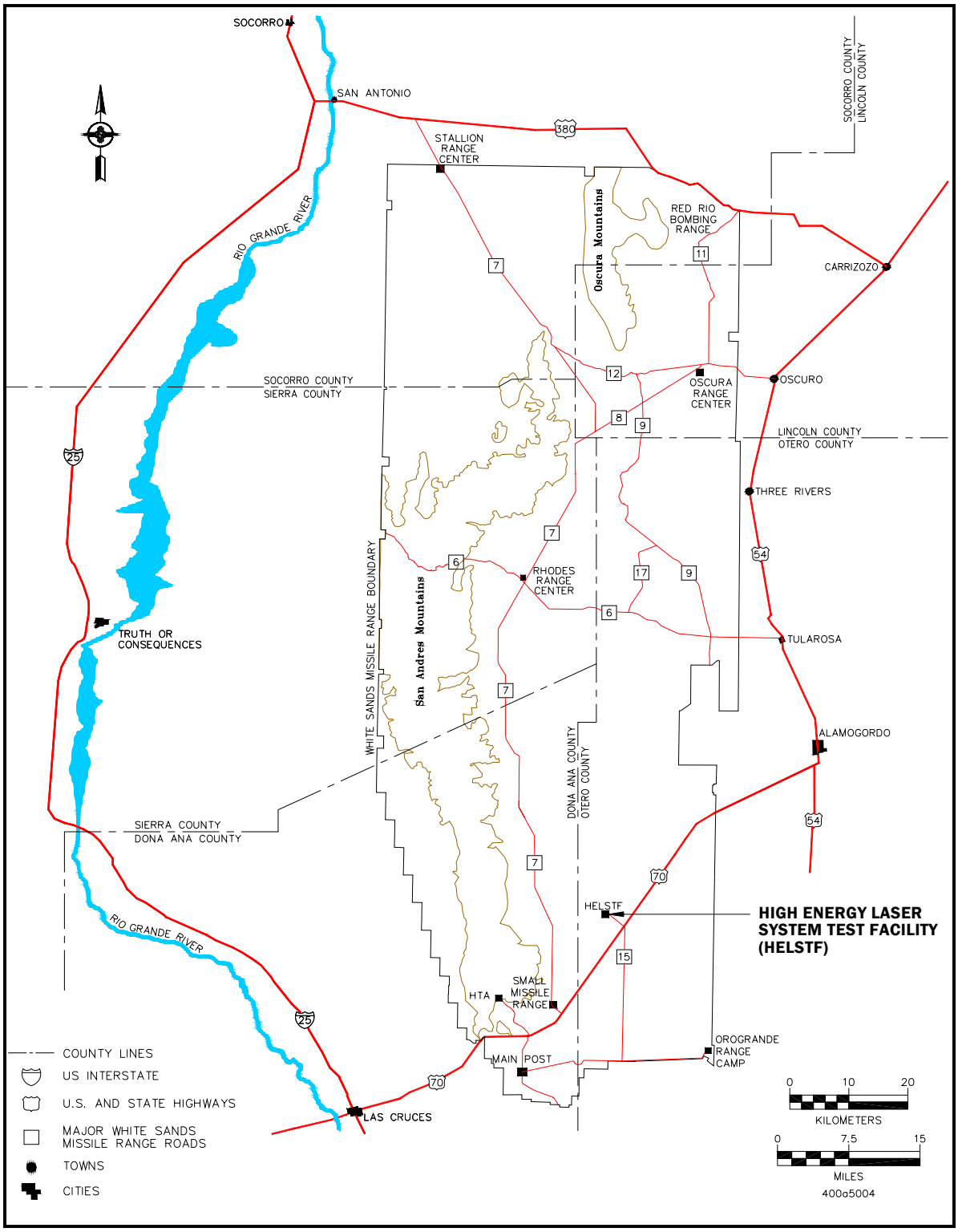

FIGURE 1-1. SITE LOCATION MAP.

1.1 Site Descriptions

The following subsections briefly describe the history, nature of contaminants and monitoring locations for each of the four SWMUs.

1.1.2 SWMUs 38 and 39 – Construction Landfills

The Construction Landfills accepted general construction waste between the early 1960's and 1989. Types of wastes buried in the landfill include wood, piping material, paper, and insulation. In addition, it was reported in the Phase II RCRA Facility Investigation (RFI) that the landfills were used to dispose of soil contaminated with hexavalent chromium that was excavated from the SWMU 143. No drainage management controls have been utilized at the landfills.

The Phase II RFI concluded that potential source contaminants from debris in the landfills include chromium, lead, mercury, organic solvents, and hydrocarbons. Geophysical survey work conducted for both the Phase I and Phase II RFIs indicated that debris was placed in 5 separate ditches (landfill cells) to a depth of 10 to 20 feet below grade. Groundwater is sampled and analyzed for a variety of indicator parameters semiannually from the wells listed in Table 1-1. The location of the wells relative to the landfill area is illustrated in Figure 1-2.

TABLE 1-1. MONITORING LOCATIONS FOR SWMUS 38 AND 39

Well No.	Northing[1] meters	Easting[1] meters	Elevation[2] Top of PVC (ft)	Screen Interval (ft)	Aquifer
HMW-29	3,611,702.26	375,457.99	3,955.63	68-78	R
HMW-32	3,611,590.71	375,373.87	3,955.57	74-89	R
HMW-33	3,611,494.00	375,405.68	3,953.48	35-50	PL
HMW-34	3,611,579.49	375,512.45	3,955.73	75-90	R
HMW-35	3,611,646.79	375,481.87	3,955.49	63-83.5	R

Notes: PVC – Plolyvinyl Chloride ft – feet R – regional aquifer PL – perched water bearing zone

1. Universal Transverse Mercator (UTM) Coordinate Systems, Zone 13, North American Datum 1983 (NAD83)
2. Elevations are based on National Geodetic Vertical Datum of 1929 (NGVD 29)

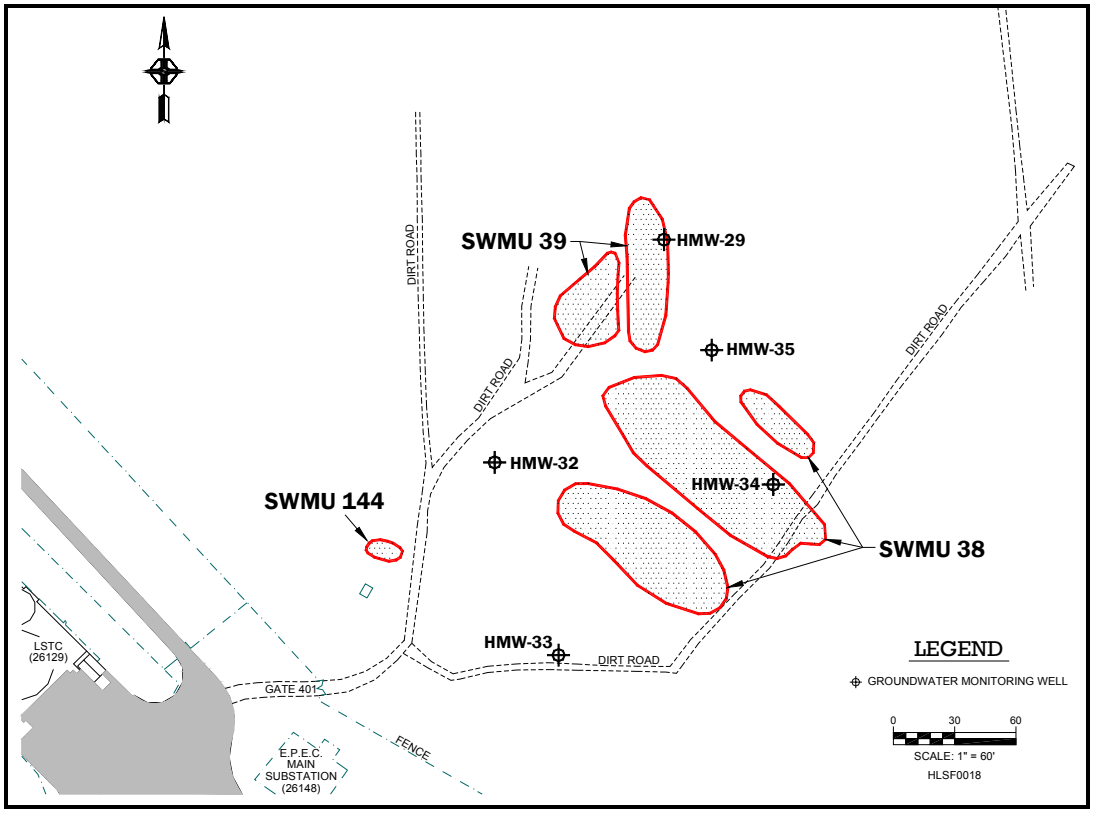

FIGURE 1-2. SAMPLING LOCATIONS FOR SWMUS 38 AND 39

1.1.3 SWMU 143 – Chromate Spill Site

The Chromate Spill Site is located in the east corner of the HELSTF Equipment Storage Area. The spill was the result of a leaking 55-gallon drum of corrosion inhibitor (Entec 300) and occurred sometime between 1982 and 1983. The corrosion inhibitor contained hexavalent chromium and zinc.

Corrective measures were implemented in 1990 and involved the removal of approximately seventeen 55-gallon drums of contaminated, near-surface soils from the site. A roof structure was constructed over the suspected spill location to prevent precipitation from entering the affected area. Confirmation sampling following the soils removal showed that hexavalent chromium contamination persisted in soils below approximately 4 feet.

Phase I and II RFIs were completed between 1992 and 1994 and indicated elevated chromium concentrations in the soil and nearby monitoring wells. Groundwater sampling conducted during the Phase II investigation resulted in detectable values of hexavalent chromium in 8 out of 13 wells sampled (Tetra Tech, 1997).

In 1998, a pilot study was conducted to assess the effectiveness of *in-situ* gaseous reduction (ISGR) of hexavalent chromium at the site. The pilot test consisted of an injection well surrounded by six extraction wells, all screened from 3 to 18 feet below the ground surface. The well field was laid out in a circular pattern approximately 30 feet in diameter. Injection of hydrogen sulfide was conducted over a 76-day period. It was concluded that injection of the reducing agent resulted in transformation of approximately 70 percent by mass of hexavalent chromium to trivalent chromium in the upper 30 feet of the vadose zone (Thornton et al., 1999). The vast majority of treated soils were 5 to 10 feet below the ground surface.

Groundwater is sampled and analyzed for a variety of indicator parameters semiannually from the wells listed in Table 1-2. The location of the wells relative to the chromium spill area is illustrated in Figure 1-3.

TABLE 1-2. MONITORING LOCATIONS FOR SWMU 143

Well No.	Northing[1] meters	Easting[1] meters	Elevation[2] Top of PVC (ft)	Screen Interval (ft)	Aquifer
HMW-11	3,611,302.42	375,080.66	3955.91[3]	47.0-62.0	PL
HMW-13	3,611,371.06	375,087.71	3956.27[3]	32.0-42.0	PL
HMW-36	3,611,343.77	375,077.12	3,955.92	11.0-12.0	PU
HMW-37	3,611,345.71	375,074.37	3,956.31	27.0-42.0	PL
HMW-38	3,611,346.42	375,071.34	3,956.52	52.0-62.0	PL
HMW-39	3,611,322.34	375,117.88	3,955.60	52.0-62.0	PL
HMW-40	3,611,293.93	375,101.89	3,953.85	28.0-38.0	PU
HMW-41	3,611,296.50	375,103.51	3,953.89	49.0-59.0	PL
HMW-43	3,611,311.02	375,054.95	3,957.22	52.5-62.5	PL

Notes: PVC – Polyvinyl Chloride ft – feet R – regional aquifer PL – perched water bearing zone

1. Universal Transverse Mercator (UTM) Coordinate Systems, Zone 13, North American Datum 1983 (NAD83)
2. Elevations are based on National Geodetic Vertical Datum of 1929 (NGVD 29), unless noted.
3. Elevations are based on North American Vertical Datum, 1988. (NAVD88)

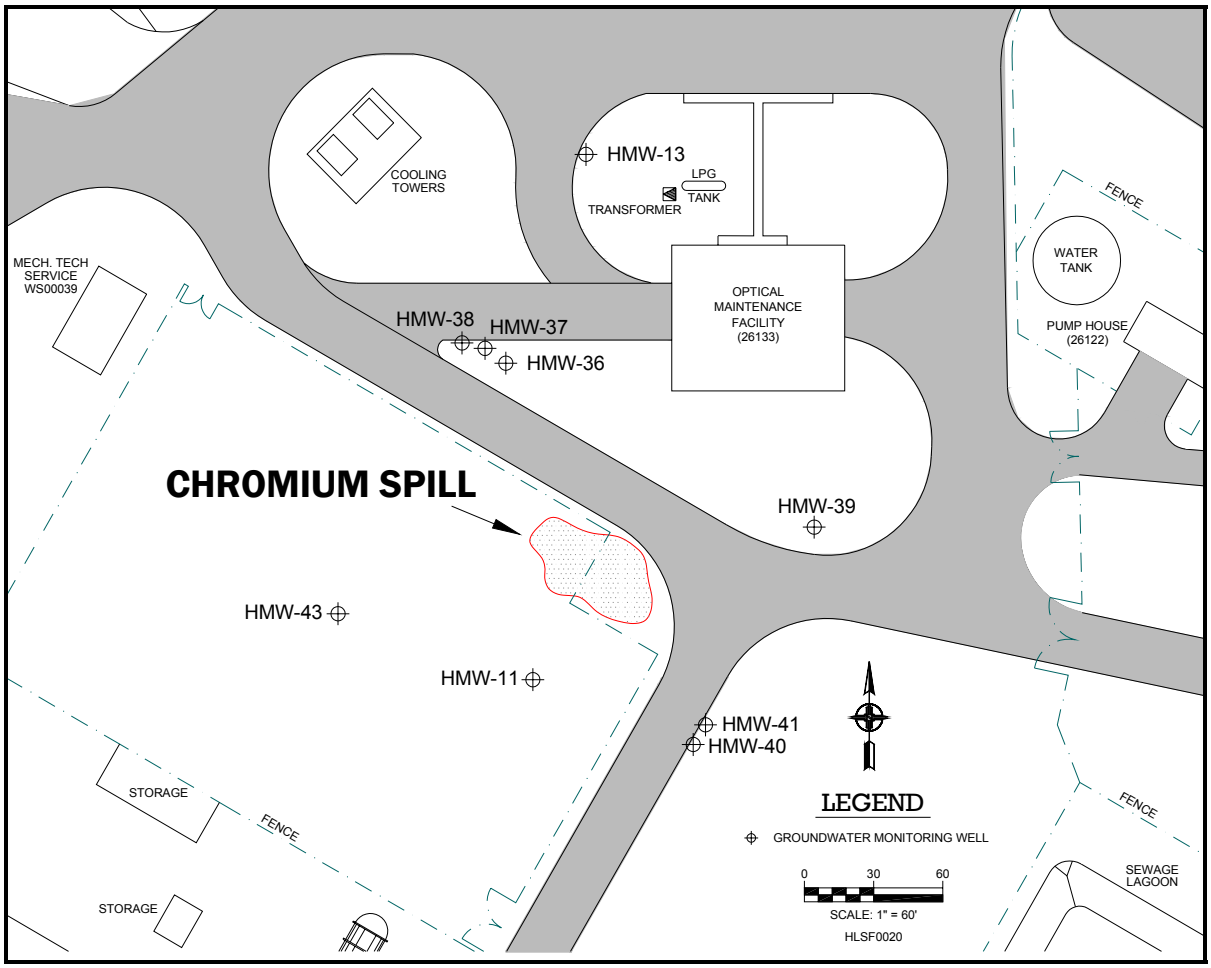

FIGURE 1-3. MONITORING LOCATIONS FOR SWMU 143

1.1.4 SWMU 154 – Systemic Diesel Spill

Free-phase diesel fuel was discovered during a RCRA facility investigation at the HELSTF Cleaning Facility (HCF) in 1989. A subsequent investigation revealed that the contamination was the result of a broken diesel supply line from a 30,000-gallon underground storage tank that supplied boilers in the Cleaning Facility basement. The location became known as the Systemic Diesel Spill Site (SWMU 154). Original estimates placed the volume of diesel fuel released at 100,000 gallons (Tetra Tech, 1994).

The Phase I RFI concluded that alkaline soils corroded the steel distribution line resulting in a release during the period 1985 to 1986. The UST was removed in April 1988. Due to the vadose zone geology of the area, diesel fuel has spread on a locally perched water-bearing zone between 40 and 50 feet below the ground surface (bgs). The contamination from SWMU 154 has been detected in wells used for monitoring SWMUs 142 and 143 due to the proximity of the three sites to each other.

A vacuum enhanced diesel recovery system (VEDRS) was installed in February 1995 to recover free-product diesel from the perched aquifer. The system employs pneumatic skimmers set on timers with an ability to apply a vacuum for inducing product flow toward the recovery wells. The product thickness as measured in the monitoring wells has steadily declined since the system was placed in operation. To date VEDRS has recovered approximately 4,700-gallons of the free product.

Groundwater is sampled and analyzed for a variety of indicator parameters semiannually from the wells listed in Table 1-3. The location of the wells relative to the diesel spill area is illustrated in Figure 1-4.

TABLE 1-3. WELL LOCATION AND CONSTRUCTION DATA.

Well No.	Northing[1] meters	Easting[1] meters	Elevation[2] Top of PVC (ft)	Screen Interval (ft)	Aquifer
DRW-1	3,611,428.81	375,066.10	3,956.66	35.0-55.0	PL
DRW-2	3,611,430.94	375,076.73	3,955.93	35.0-55.0	PL
DRW-3	3,611,440.74	375,070.20	3,956.81	35.0-55.0	PL
DRW-4	3,611,448.25	375,072.09	3,956.69	35.0-55.0	PL
DRW-5	3,611,444.56	375,091.52	3,955.47	35.0-55.0	PL
DRW-12	3,611,369.87	375,094.10	3,956.41	35.0-55.0	PL
DRW-13	3,611,415.02	375,124.03	3,955.34	35.0-55.0	PL
DRW-16	3,611,484.48	375,048.46	3,956.05	65.0-85.0	R
HCF-1	3,611,395.13	375,064.80	3,957.87	40.0-60.0	PL
HCF-5	3,611,431.58	375,063.05	3,956.99	35.0-55.0	PL
HCF-7	3,611,436.66	375,076.70	3,957.24	35.0-55.0	PL

Notes: PVC – Polyvinyl Chloride ft – feet R – regional aquifer PL – perched water bearing zone

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)

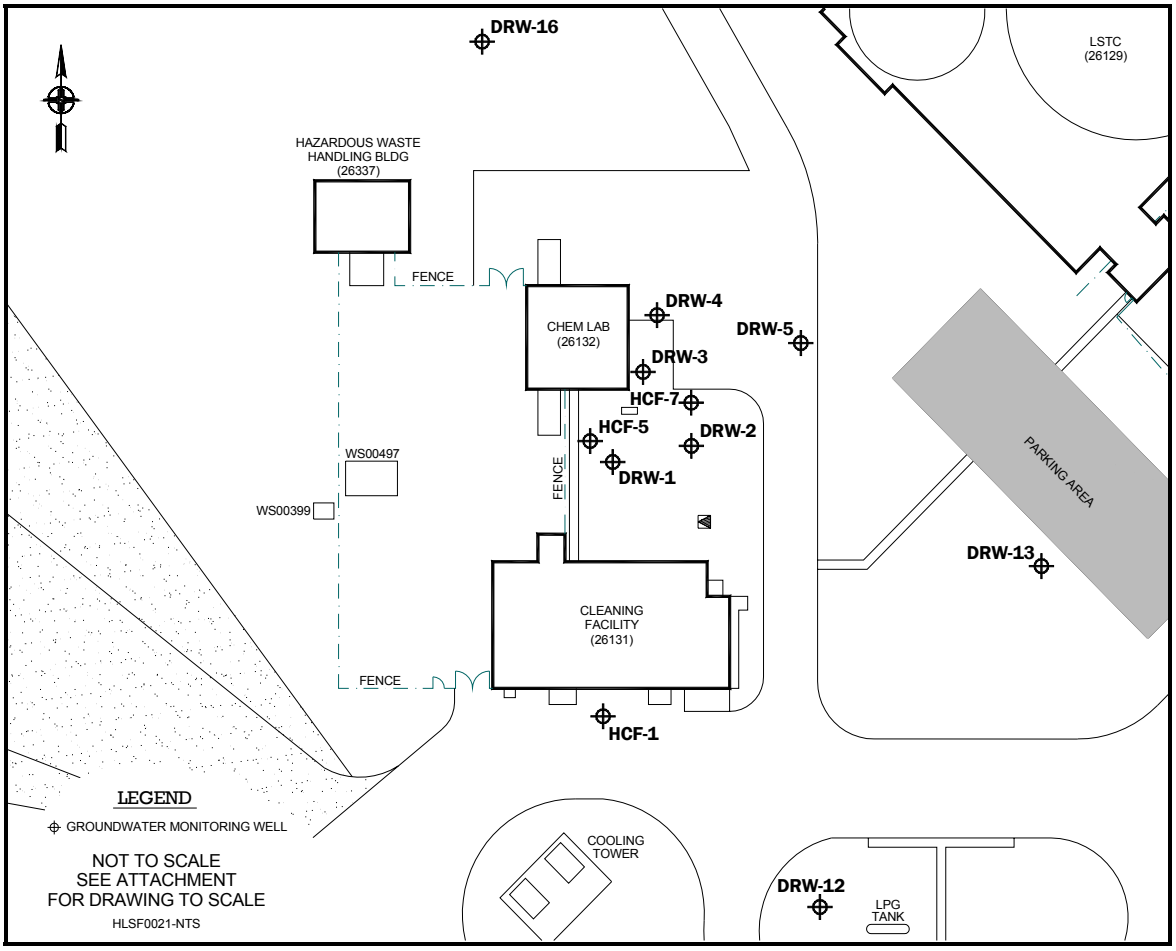

FIGURE 1-4. MONITORING LOCATIONS FOR SWMU 154

1.2 Climate

The climate at the HELSTF is typical of an arid Southwestern basin. Annual precipitation is approximately 7 inches. Much of this precipitation occurs between July and September during brief heavy thunderstorms.

The temperature during the winter ranges from 30 to 60 degrees Fahrenheit. "Nighttime temperatures reach freezing on most nights from November to mid-March, but an average of only 1 day a year remains freezing" (Neher and Bailey, 1976). During the summer, temperatures can rise in excess of 100 degrees Fahrenheit.

The infrequent precipitation and warm weather leads to arid soil and sparse vegetation. Strong westerly winds give rise to considerable dust storms that are most frequent during the spring.

1.3 Regional Geology

The majority of the WSMR is situated within the Tularosa Basin, with areas along the western and northwestern boundary extending into the Jornada del Muerto Bolson. The Tularosa Basin is a large flat valley bounded by the Organ, San Augustin, San Andres and Oscura Mountains to the west (Figure 1-5).

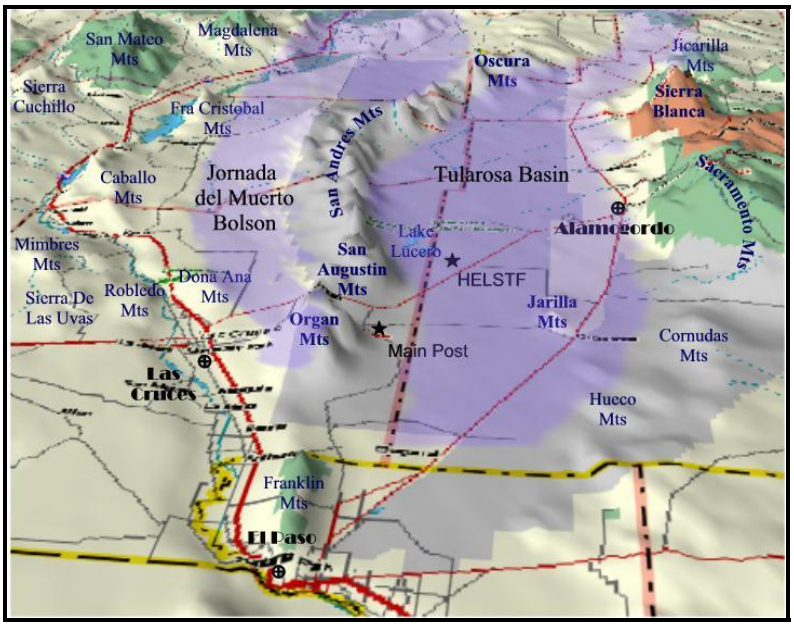

FIGURE 1-5. RELIEF MAP SHOWING MOUNTAIN RANGES

The eastern limit of the basin lies outside of the range, and is formed from north to south by the Jicarilla, Sierra Blanca, Sacramento, Cornudas, and Hueco Mountains. The Tularosa Basin is actively subsiding relative to the north-south trending normal faults (Figure 1-6) that produce mountain ranges on either side of the basin.

Lake Lucero, the lowest elevation in the basin, is 3,887 feet above mean sea level (MSL). The mountain elevations range on average between 5,500 and 9,000 feet above MSL. The Sierra Blanca Peak rises to a height of approximately 12,000 feet above MSL.

Erosion of the mountain fronts transports clastic sediment into the basin where it is deposited. As subsidence continues, the sediments may be re-worked by wind and water, but are ultimately buried under sediments produced by younger depositional events.

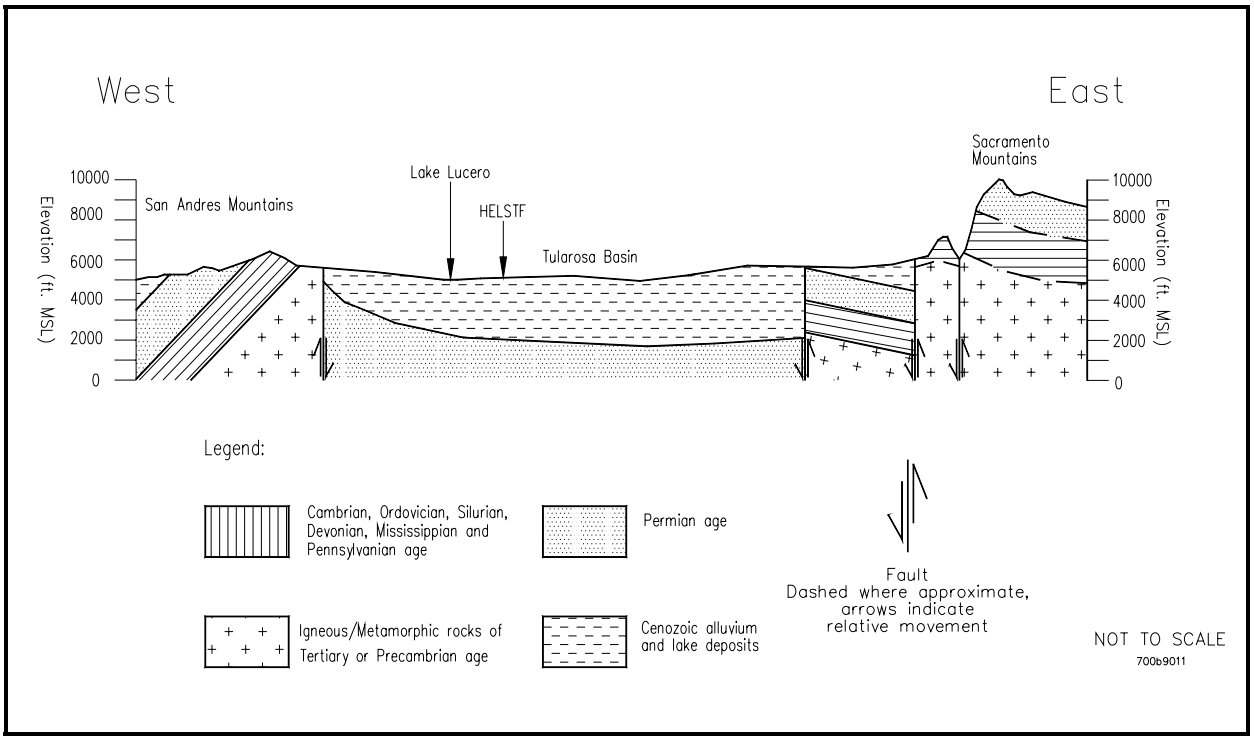

FIGURE 1-6.
GENERALIZED EAST-WEST CROSS SECTION OF THE SOUTHERN PART OF THE TULAROSA BASIN, NORTH OF HIGHWAY 70 (USACE, 1989).

The nature of the bolson-fill deposits varies both laterally and vertically throughout White Sands. Coarse-grained, poorly sorted sediments deposited near mountain fronts grade into fine-grained, well-sorted sediments towards the center of the basin (Kelly, 1973). Sediments further from the mountain fronts also contain a greater percentage of clay and gypsum.

HELSTF is located near the depositional axis of the basin, just south of the eolian gypsum dunes of the White Sands National Monument. As a result of the central basin setting and the proximity to the source of the gypsum sand (Lake Lucero), the subsurface geology at HELSTF consists of unconsolidated, fine-grained clasitic sediments interspersed with gypsum and minor selenite re-deposited from solution.

1.4 Hydrogeology

The Tularosa Basin has no surface outlets for drainage. Very little surface water exists due to the low annual precipitation, high evapotranspiration rates, and moderate infiltration characteristics of the soil. When heavy precipitation events occur, they produce intermittent streams (arroyos) from runoff draining down the surrounding mountains. No major arroyos pass through the HELSTF site. Lake Lucero, the most prominent expression of surface water, is in the center of the alkali flats, north and west of HELSTF, and contains very little water.

The Tularosa Basin, an otherwise closed system, connects with the Hueco Basin at the New Mexico/ Texas state line to form a single aquifer system called the Hueco-Tularosa aquifer. “This complex groundwater reservoir is the primary source of water for the City of El Paso and Ciudad Juarez, and for military installations and smaller cities in New Mexico, Texas, and Mexico. Recharge occurs primarily from precipitation and infiltration of mountain runoff through major arroyos; and recharge rates are much less than groundwater withdrawals” (Creel, B.J. and Hawley, J.W, 2001).

The regional groundwater flow in the basin is generally to the southeast with local gradients perpendicular the mountain fronts where recharge is greatest. Potable water is largely confined to alluvial fans along the mountain ranges. Water quality decreases as it moves away from the mountain fronts and mixes with slower moving brackish water at the basin interior. HELSTF, located within the alkali flats, does not produce potable water. It receives water from three supply wells (MAR-1, MAR-2, and MAR-3) located seven miles to the west along Range Road 7 (Figure 1-7).

Elevated concentrations of naturally occurring compounds are present in the regional groundwater beneath HELSTF. 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 elevates the concentrations of total dissolved solids, chloride, sulfate, boron, selenium, and sodium in groundwater samples.

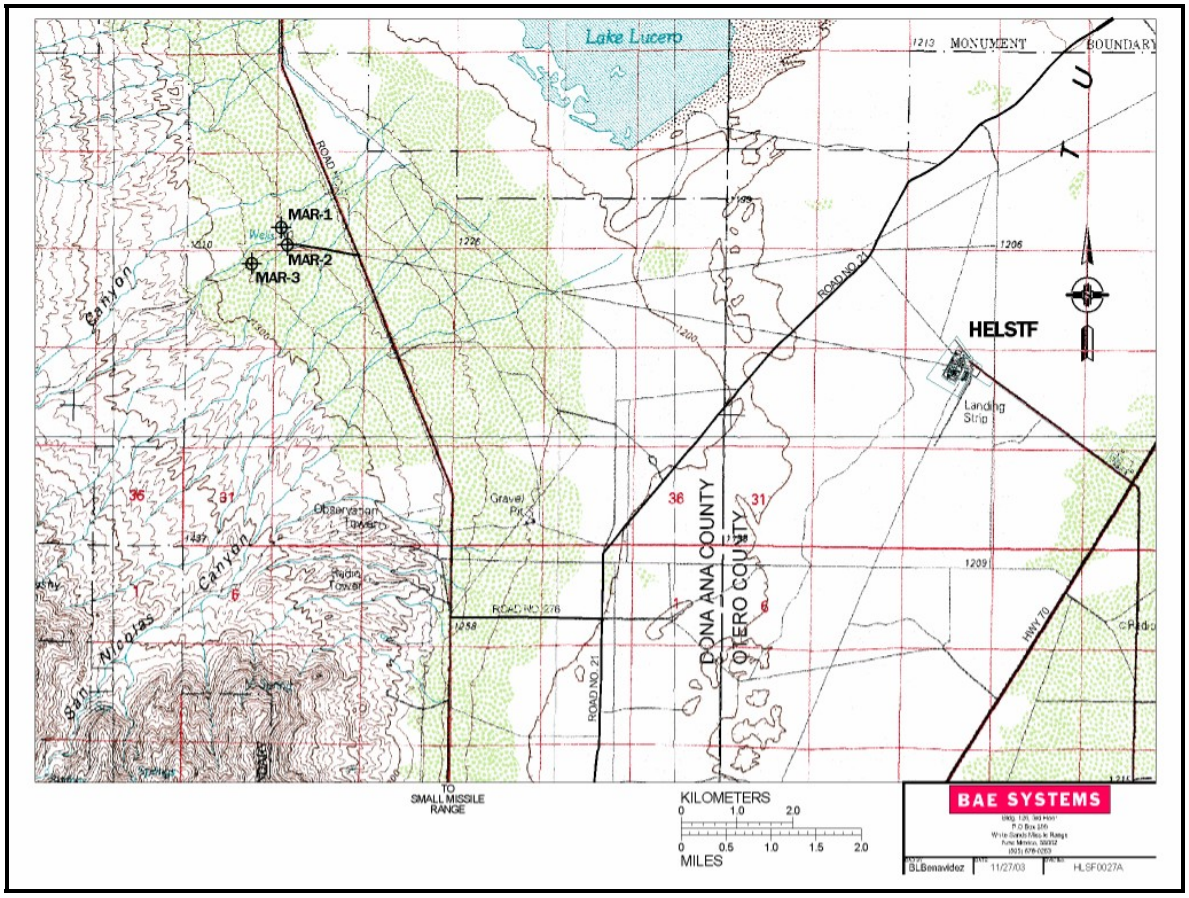

FIGURE 1-7. LOCATION OF HELSTF SUPPLY WELLS.

Groundwater occurs in several horizons beneath HELSTF and has been defined (in previous studies) as the upper perched, perched, and regional aquifers. The upper perched unit (17 to 26 feet bgs) is believed to be the result of discharges from leaking pipes and the sewage lagoons. The perched unit (29 to 55 feet bgs) may be result of slow moving recharge water and leakage from upper perched units. The regional groundwater table is encountered at 69 to 75 feet below the surface.

2.0 GROUNDWATER MONITORING

Samples are collected from selected monitoring wells and are analyzed for a suite of analytes. A list of analytes and the methods used for monitoring are referenced in Tables 2-1 and 2-2.

TABLE 2-1. HELSTF GROUNDWATER MONITORING ANALYTE LIST.

Parameter			Reference Method	Method Type
Water Quality Parameters				
pH Temperature	Conductivity Dissolved Oxygen		Field Measurement	Orion water quality meter (Model 394)
CO_3^{-2} & HCO_3^- Alkalinity			SM 2320B	Titrimetric
PH Specific Conductance Total Dissolved Solids (TDS) Total Organic Carbon			SM 4500-H+ SM 2510B SM 2540C EPA 415.1	Electrometric Conductivity Gravimetric Combustion
Dissolved Ions				
Bromide Chloride Fluoride	Nitrate-N Nitrite-N Sulfate		EPA 300.0	Ion Chromatography
Nutrients				
Ammonia-N Total Kjeldahl Nitrogen Total Phosphorus			SM 4500-NH3 EPA 351.3 SW846-6010B	Colorimetric Colorimetric ICP-AES
Total Metals				
Aluminum Arsenic Barium Beryllium Boron Cadmium Chromium	Cobalt Copper Iron Lead Manganese Molybdenum Nickel	Selenium Silica Silver Strontium Tin Vanadium Zinc	SW846-6010B	ICP-AES
Cyanide (Spring sampling event only)			SW846-9010B	Colorimetric
Mercury			SW846-7470A	Cold Vapor-Atomic Absorption (AA)
Hexavalent Chromium			SM 3500-Cr D	Spectrophotometer
Dissolved Metals				
Aluminum Arsenic Barium Beryllium Boron Cadmium Chromium	Cobalt Copper Iron Lead Manganese Molybdenum Nickel	Selenium Silica Silver Strontium Tin Vanadium Zinc	SW846-6010B	ICP-AES
Total and Dissolved Salts				
Calcium Lithium Magnesium	Potassium Sodium		SW846-6010B	ICP-AES
Organics				
Volatile Organic Compounds (VOCs)			SW846-8260B	GC/MS
Semi-Volatile Organic Compounds (SVOCs)			SW846-8270C	GC/MS
Explosive Residues			SW846-8330 C18	HPLC
Petroleum Hydrocarbons – DRO & GRO			SW846-8015B	GC/FID

EPA – Environmental Protection Agency
SM – Standard Methods
HPLC - High Performance Liquid Chromatography
ICP-AES - Inductively Coupled Plasma-Atomic Emission Spectroscopy
GC – Gas Chromatography; MS - Mass Spectrometry; FID - Flame Ionization Detector
DRO – Diesel Range Organics; GRO – Gasoline Range Organics

TABLE 2-2.
ADDITIONAL ANALYTES FOR THE HELSTF CONSTRUCTION LANDFILL MONITORING

Parameter	Reference Method	Method Type
Organics		
Herbicides	SW846-8151	GC
Pesticides	SW846-8081A	GC
GC – Gas Chromatography		

A field logbook is maintained for each sampling event. The book serves to permanently record the persons present, the date and times of any activities, the well number, air temperature, relative humidity, general weather conditions, and other monitoring data described below.

Water level elevations are measured from the top of casing for all the wells. Each well is purged until measurements of temperature, pH, conductivity and appearance stabilize but not less than three and no more than five well volumes. A complete description of the standard operating procedures used to acquire field measurements and collect groundwater samples is included as Appendix A. The purge volume is calculated for each well by obtaining depth to water, total well depth and well casing diameter.

The monitoring wells at the HELSTF Construction Landfill and Chromate Spill sites are purged and sampled using a disposable bailer. The monitoring wells at the HELSTF Systemic Diesel Spill site are purged and sampled using a Grundfos submersible impeller pump, except for wells DRW-12, 13 and 16. These three are purged and sampled using a disposable bailer since recovery becomes difficult using a submersible pump (these wells go dry).

Samples are collected in new clean containers for laboratory chemical analyses. Equipment that has come into contact with the groundwater is decontaminated after each well using an Alconox/water solution and a water rinsate. Purge and decontamination water is containerized for analysis and proper off-site disposal. Documentation for the handling and disposal of purge water developed during sampling activities are provided in Appendix B.

3.0 REGULATORY CRITERIA

Laboratory analytical results were compared to latest NMWQCC standards for groundwater. Where appropriate, the EPA's maximum contaminant level (MCL), maximum contaminant level goal (MCLG), and health advisories (HA) were compared to the analytical results.

4.0 GROUNDWATER MONITORING RESULTS

The monitoring wells at the four SWMUs were sampled during the Winter (February/March) and Summer (July and August) of 2004 in accordance with established protocols described in Section 2.0. Water level elevations and water quality measurements at the time of sampling are listed in Table 4-1a.

The depth to water was corrected to account for the depression in the water table caused by free product in the wells at the HELSTF Systemic Diesel Spill site. The corrected depths to water results shown in Table 4-2a was determined using the following equation (Hudak et.al, 1993):

$$CDTW = DTW - (PT \times S.G.)$$

CDTW - Corrected Depth to Water
DTW - Depth to Water
S.*G.* - Specific Gravity (of Product)
PT - Product Thickness

TABLE 4-1
FIELD WATER QUALITY MEASUREMENTS (WINTER 2004)

Well No.	Date Sampled	Temperature (°C)	pH	Conductivity µS/cm	Dissolved Oxygen (mg/L)	Depth to Water TOC - (ft)
HELSTF Construction Landfill						
HMW-29	2/4/2004	17.3	7,41	13.46	6.5	73.49
HMW-32	2/4/2004	16.2	7.31	13.61	7.94	73.28
HMW-33	2/4/2004	16.5	7.29	30.1	6.5	41.2
HMW-34	2/4/2004	18.7	7.26	12.59	4.25	74.79
HMW-35	2/5/2004	17.8	7.41	11.61	5.6	73.39
HELSTF Chromate Spill						
HMW-11	2/18/2004	22.1	7.31	17.92	6.61	46.65
HMW-13	2/9/2004	19.7	7.04	7.62	9.38	41.24
HMW-36	2/18/2004	22.4	7.23	6.76	3.38	21.88
HMW-37	2/17/2004	20.7	7.33	6.15	5.64	38.9
HMW-38	2/17/2004	20.5	7.52	13.57	4.96	44.94
HMW-39	2/20/2004	18.9	7.25	19.53	10.24	44.7
HMW-40	2/20/2004	20.1	7.54	34	4.05	19.7
HMW-41	2/20/2004	19.8	7.33	22.8	6.54	43.07
HMW-43	2/18/2004	21.4	7.45	8.14	6.11	42.29
HELSTF Systemic Diesel Spill						
DRW-1	3/3/2004	16.4	7.04	8.45	5.37	42.7
DRW-2	3/4/2004	17.7	7.6	11.68	2.77	43.7
DRW-3	3/3/2004	20.9	7.08	14.44	1.62	42.98
DRW-4	3/5/2004	17.8	7.04	10.83	3.06	42.36
DRW-5	3/5/2004	15.9	7.02	8.06	7.62	43.26
DRW-12	3/8/2004	25.5	7.32	30.4	2.25	44.47
DRW-13	3/4/2004	18.3	7.29	10.03	7.29	43.3
DRW-16	3/3/2004	19.5	6.34	15.94	7.2	73.02
HCF-1	3/8/2004	24.4	6.82	9.14	6.65	45.38
HCF-5	3/3/2004	18.8	7.04	9.85	2.6	47.33
HCF-7	3/4/2004	20.6	7.02	9.74	1.49	43.51

Notes: °C – Degrees Celsius. µS/cm – microsiemens per centimeter mg/L – milligrams per liter
toc – top of casing ft – feet

1. Elevations are based on National Geodetic Vertical Datum of 1929, unless noted.
2. Elevations are based on North American Vertical Datum, 1988. (NAVD88)

TABLE 4-1A.
CORRECTED WATER LEVEL MEASUREMENTS (WINTER 2004)

Well No.	Date Sampled	Depth to Product [1] (ft)	Depth to Water (ft)	Product Thickness (ft)	Corrected Depth to Water [2] (ft)
DRW-1	3/3/2004	41.93	42.7	0.77	42.04
DRW-2	3/4/2004	43.6	43.7	0.10	43.61
DRW-3	3/3/2004	42.64	42.98	0.34	42.69
DRW-4	3/5/2004	-	42.36	0	42.36
DRW-5	3/5/2004	-	43.26	0	43.26
DRW-12	3/8/2004	-	44.47	0	44.47
DRW-13	3/4/2004	-	43.3	0	43.30
DRW-16	3/3/2004	-	73.02	0	73.02
HCF-1	3/8/2004	45.37	45.38	0.01	45.37
HCF-5	3/3/2004	44.19	47.33	3.14	44.63
HCF-7	3/4/2004	42.25	43.51	1.26	42.43

1. All depths are measured from top of casing. Notes: ft – feet.
2. Product specific gravity = 0.86.

TABLE 4-2. FIELD WATER QUALITY MEASUREMENTS (SUMMER 2004)

Well No.	Date Sampled	Temperature (°C)	pH	Conductivity µS/cm	Dissolved Oxygen (mg/L)	Depth to Water TOC - (ft)
HELSTF Construction Landfill						
HMW-29	7/6/2004	21.58	7.23	12.42	6.03	73.66
HMW-32	7/19/2004	21.21	7.30	12.45	6.87	73.52
HMW-33	7/20/2004	22.46	7.41	28.36	6.97	41.77
HMW-34	6/30/2004	22.11	7.34	–	7.87	75.06
HMW-35	6/29/2004	20.47	7.28	10.92	6.00	73.62
HELSTF Chromate Spill						
HMW-11	7/26/2004	22.28	7.21	18.11	3.94	47.4
HMW-13	7/29/2004	25.49	7.06	7.117	0.41	43.25
HMW-36	7/28/2004	23.88	6.92	9.718	0.37	21.87
HMW-37	7/28/2004	22.55	7.14	5.845	0.39	40.04
HMW-38	7/28/2004	21.66	7.33	13.26	0.56	45.25
HMW-39	8/2/2004	21.61	7.2	18.69	0.4	45.11
HMW-40	7/22/2004	22.04	7.53	34.89	7.67	23.22
HMW-41	7/22/2004	21.91	7.22	20.843	6.56	43.35
HMW-43	7/27/2004	23.39	7.25	7.841	1.39	43.35
HELSTF Systemic Diesel Spill						
DRW-1	8/17/2004	23.41	7.04	8.43	0.11	42.62
DRW-2	8/18/2004	25.17	7.6	10.15	0.59	49.35
DRW-3	8/12/2004	25.07	7.08	11.66	0.004	43.13
DRW-4	8/12/2004	24.01	7.04	10.37	0.08	42.08
DRW-5	8/10/2004	23.08	7.02	8.12	0.38	43.94
DRW-12	8/9/2004	22.48	7.32	29.51	3.39	45.13
DRW-13	8/11/2004	22.93	7.29	10.21	3.14	44.01
DRW-16	8/10/2004	24.04	6.34	16.09	4.18	72.96
HCF-1	8/11/2004	23.84	6.82	9.87	1.15	46.28
HCF-5	8/18/2004	23.81	7.04	8.38	0.08	44.03
HCF-7	8/17/2004	23.57	7.02	7.32	0.13	49.99

Notes: °C – Degrees Celsius. µS/cm – microsiemens per centimeter mg/L – milligrams per liter toc – top of casing ft – feet
1. Elevations are based on National Geodetic Vertical Datum of 1929, unless noted.
2. Elevations are based on North American Vertical Datum, 1988. (NAVD88)

TABLE 4-2A. CORRECTED WATER LEVEL MEASUREMENTS (SUMMER 2004)

Well No.	Date Sampled	Depth to Product [1] (ft)	Depth to Water (ft)	Product Thickness (ft)	Corrected Depth to Water [2] (ft)
DRW-1	8/17/2004	42.08	42.62	0.54	42.16
DRW-2	8/18/2004	43.51	49.35	5.84	44.33
DRW-3	8/12/2004	-	43.13	0	43.13
DRW-4	8/12/2004	-	42.08	0	42.08
DRW-5	8/10/2004	-	43.94	0	43.94
DRW-12	8/9/2004	-	45.13	0	45.13
DRW-13	8/11/2004	-	44.01	0	44.01
DRW-16	8/10/2004	-	72.96	0	72.96
HCF-1	8/11/2004	46.26	46.28	0.02	46.26
HCF-5	8/18/2004	42.84	44.03	1.19	43.01
HCF-7	8/17/2004	44.44	49.99	5.55	45.22

1. All depths are measured from top of casing. Notes: ft – feet.
2. Product specific gravity = 0.86.

The groundwater gradient and average flow direction could not be accurately estimated. During a facility wide monitoring well inspection and rehabilitation program at HELSTF, it was discovered that many of the wells had risers that were not properly secured. As a result, the top of casing elevations presented in Tables 1-1 thru 1-3 and the resulting groundwater elevation calculations in Table 4-1 are not within the +/- 0.01 feet tolerance required for making such a determination. The well risers have now been secured are scheduled to be resurveyed during an upcoming phase III RFI at the facility.

5.0 GROUNDWATER CHEMICAL ANALYTICAL DATA

This section presents the analytical results for the groundwater monitoring activity described above. Primary samples were collected from all the wells. Separate sample volumes were collected for quality control (QC) analysis from select wells. Data validation was further supported by the use of trip blanks.

Concentrations of detected analytes for the Winter 2004 sampling event are presented in Attachment 1. The total results for all sampling during the Summer 2004 sampling event are shown in Attachment 2. Concentrations that exceeded the NMWQCC standards are indicated in **bold** print. The complete set of analytical results for each sampling event have been put into adobe PDF format and are contained on a CD disc enclosed in Appendix C.

The results revealed a number of analytes which exceed the NMWQCC standards. These include total dissolved solids, chloride, fluoride, nitrate-N, sulfate, arsenic, boron, chromium, cobalt, iron, molybdenum, nickel, selenium, vanadium, 1,1-dichloroethane, 1,1-dichloroethene, benzene, and trichloroethene (TCE). NMWQCC semi-volitile toxic pollutants that were also detected include: 1-methylnaphthalene , 2-methylnaphthalene and naphthalene. These semi-volatile toxic pollutants were primarily detected in monitoring well HCF-7 located in SWMU 154.

The pesticide, toxaphene, was detected during the Winter 2004 in sampling well HMW-34 (SWMUs 33 and 34) at a level of 0.0267 mg/l. Toxaphene is an insecticide which is usually found as a solid or gas and from 1947 to 1980 toxaphene was primarily used in the southern United States on cotton crops. Other potential uses or sources include cattle dip for scabies. Toxaphene was not detected in HMW-34 during the Summer 2004 sampling event or in prior year of 2003 sampling, indicating a potential anomaly.

The explosive residue compound HMX was found in wells DRW1,DRW2, DRW3, DRW4, DRW5 and HCF5. Other explosive residues detected include 2NT at low levels in DR5 and DR12 and 2,6-DNT / 2,4-DNT was detected in HCF5 and HCF7. The explosive residue 4NT was detected at level below of 0.84-ug/l (less than 1 part per billion) in HMW-29.

Benzene was selected as an indicator parameter for dissolved diesel fuel. Although it is a minor constituent of diesel, it is more soluble than many of the larger constituents. It is also a regulated substance with a NMWQCC standard of 10 ug/L. The wells with concentrations currently or previously exceeding the standard are located in SWMU 154. These wells are: DRW1, DRW2, DRW3, DRW4 and HCF1, HCF5, and HCF7. The wells which are contaminated with benzene were those wells which had free product or were directly downgradient of the product in the perched water table.

A number of solvents have been detected in the monitoring wells at all four SWMUs covered by this report. Two of the more frequently detected solvents are 1,1-dichloroethene and trichloroethene (TCE). The presence of these two chemicals in the monitoring wells for the Chromate and Systemic Diesel Spills are most likely the result of plume migration from the Cleaning Facility (SWMU 142).

1,1-dichloroethane was detected in the perched water table. Its presence is likely the result of the release at the cleaning facility. It was selected for further qualitative analysis because it is related to the chemicals used at the facility and was frequently detected in nearby monitoring wells. It is also a regulated substance with a NMWQCC standard of 25 ug/L. The wells with detected concentrations of this parameter exceeding or approaching the standard are located in SWMU 154 and include: DRW1, DRW2, DRW3, and HCF7.

The wells with concentrations consistently below 100 ug/L do not have a consistent overall trend. Those that contain free product diesel (DRW-1 and DRW-2) show significant variability. This may be the result of solvent being carried in solution by the diesel fuel and dissolving into the water as a secondary source. The other wells show a fairly consistent pattern with DRW-5 having a gradual increase until 2002 when it began to decline.

TCE was detected in both the regional and perched water table. TCE is suspected to be a solvent released from the cleaning facility. Its presence in the perched water table near the release is indicative of this. The presence of TCE and other solvents in monitoring wells HMW-33 may suggest the presence of solvent disposal at the construction landfills. However, the higher concentrations of TCE are located in SWMU 154. The wells with detected concentrations of this parameter exceeding the standard are HWM 41 and DRW16. HWM 11, HWM 38, HWM 39 have levels of TCE at approximately ½ of the standard. The concentrations of TCE in the perched water table have remained relatively stable, with the exception of HMW-41. The concentrations in HMW-41 have steadily declined since monitoring began. Although it still has the highest measured concentrations of TCE, the concentration dropped slightly during the August sampling event to 202 ug/l from 213 ug/l from the previous summer sampling event in 2003. The reason for the presence of TCE in the regional monitoring well (DRW-16) is not currently known. The concentration of TCE in DRW 16 increased from 64.3 ug/l in 2003 to 104 ug/l in the summer of 2004 exceeding the NMWCC standard for TCE.

Chromium has been detected in a majority of the monitoring wells since they were first installed. It is known that the Chromate Spill, Cleaning Facility and Construction Landfills are sources of chromium contamination. Total dissolved chromium has NMWCC standard of 0.05 mg/L. Total dissolved chromium has been decreasing in concentration in all monitoring wells since 2003.

The concentrations of dissolved hexavalent chromium were also qualitatively analyzed to understand the fate of the more toxic form of chromium. The original releases of chromium were in the hexavalent form. It is expected that some of the hexavalent chromium has been and will continue to be converted to the trivalent form due to natural degradation processes. The trends of hexavalent chromium in all of the monitoring wells have been decreasing since the 2003 sampling event. The results for DRW-16 indicate that the chromium contamination in the regional aquifer is also present in the hexavalent form but is continuing to dissipate.

Fluoride was selected for qualitative analysis since it is not related to any of the SWMUs discussed in the introduction. Fluorspar waste is generated at HELSTF and is treated in the fluorspar tanks (SWMUs 33 and 34). The tanks serve as drying beds and are periodically emptied by hauling the waste off site for disposal. Fluoride has a NMWQCC standard of 1.6 mg/L. The perched water table and regional aquifer contain fluoride. The concentrations have fluctuated since 1998. Fluoride is a naturally occurring compound. The concentrations are higher in the perched water table than the regional aquifer suggesting that a release of fluoride may have occurred in locations beyond the fluorspar tanks.

6.0 SUMMARY

Routine groundwater monitoring is conducted at several HELSTF SWMUs (38, 39, 143 and 154). This report presented the results of the winter and summer 2004 sampling event at the four SWMUs.

The contaminants of concern which exceed the NMWQCC standards for groundwater, include total dissolved solids, chloride, fluoride, nitrate-N, sulfate, arsenic, boron, cadmium, chromium, cobalt, iron, lead, molybdenum, nickel, selenium, strontium, vanadium, 1,1-dichloroethane, 1,1-dichloroethene, benzene, and TCE. The following toxic pollutant compounds were detected: 1-methylnaphthalene and 2-methylnaphthalene, and naphthalene.

Explosive residues were detected in a majority of the sampling wells in SWMU 154. Sulfate, boron and selenium are not associated with any release and are believed to be naturally occurring in this region.

TDS concentrations can be influenced by anthropogenic sources. However, the impact on TDS concentrations of the contamination is limited since the naturally occurring groundwater far exceeds the

limits acceptable for human consumption. It is important to note the majority of the water samples have been taken from wells that have total dissolved solids concentrations above 10,000 mg/l. The NMWQCC standards are applicable primarily for water systems with less than 10,000 mg/l of total dissolved solids. Benzene and free product associated with the systemic diesel spill have declined over time and are relatively stable. There is still a measurable area impacted by free product diesel though smaller than prior to initiation of the interim response measure in 1995.

Chromium has been detected throughout the perched aquifer at concentrations exceeding the NMWQCC standards. Probable sources include the chromate spill (SWMU 143), cleaning facility spill (SWMU 142) and the construction landfills (38 and 39). The regional aquifer has also been impacted by concentrations exceeding the standard at monitoring well DRW-16. The source of this chromium has not been determined yet. The concentrations of chromium in the perched water table have varied over time. The concentration of dissolved chromium has decreased from the 2003 sampling event in all of the monitoring wells.

Solvents believed to originate from the cleaning facility spill have been detected in wells associated with the systemic diesel spill and chromate spill. This is likely a result of overlapping plumes due to their close proximity. The concentration of these analytes has been generally stable with the exception of monitoring well HMW-41 and wells containing free product diesel. Solvents were also detected in wells associated with the construction landfills. The regional aquifer has been impacted by TCE at monitoring well DRW-16. The origin of this contamination has not been identified yet. The concentration of TCE increased from 64.3 ug/l in 2003 to 104 ug/l in the summer of 2004. The NMWCC standard for TCE is 100 ug/l.

Fluoride was also detected above the NMWQCC standards although it was not known to be associated with any of the SWMUs in this report. The nature and extent of the fluoride has not been established. The concentration of fluoride in the wells has fluctuated over time.

The NMWQCC groundwater exceedances are primarily located in SWMU 143 Chrome Spill Site and SWMU 154 Diesel Spill Site. Several parameters that are being measured for on a semi-annual basis have not been detected in the 2003 and 2004 sampling events in SWMU areas 38 and 39. These specific analyte parameters include: explosives, pesticides and herbicides, semi-Volatile compounds, and petroleum hydrocarbons. If this trend of non-detection continues in 2005 sampling data, these analytes will be recommended for elimination from testing or, at a minimum, the frequency of testing be reduced to one event per calendar year for the above specific parameters.

REFERENCES

NMAC 20.6.2 Environmental Protection Water Quality Ground and Surface Water Protection

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

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.*

THIS PAGE INTENTIONALLY LEFT BLANK

ATTACHMENT 1

DETECTED ANALYTES – FEBRUARY 2004
HELSTF GROUNDWATER SAMPLING EVENT

ATTACHMENT 1
Detected Analytes for the February 2004 HELSTF Groundwater Sampling Event.

Water Quality Parameters			SWMUs 38 and 39						SWMU 143											SWMU 154											
Analyte	Unit	NMWQCC Std	HMW-29	HMW-32	HMW-33	HMW-33 QC	HMW-34	HMW-35	HMW-11	HMW-13	HMW-13 QC	HMW-36	HMW-37	HMW-38	HMW-39	HMW-39 QC	HMW-40	HMW-41	HMW-43	DRW-1	DRW-2	DRW-3	DRW-3 QC	DRW-4	DRW-5	DRW-12	DRW-13	DRW-16	HCF-1	HCF-5	HCF-5 QC	HCF-7
Alkalinity, Total	mg/L	NE	224	176	182	182	218	170	172	144	142	552	146	160	178	178	130	234	142	1980	1500	2470	2620	2690	644	208	168	176	344	2430	2320	1530
Alkalinity, Bicarbonate	mg/L	NE	224	176	182	182	218	170	172	144	142	552	146	160	178	178	130	234	142	1980	1500	2470	2620	2690	644	208	168	176	344	2430	2320	1530
Alkalinity, Carbonate	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
pH	unitless	6.0-9.0	7.5	7.5	7.5	7.5	7.5	7.5	7.6	7.6	7.6	7.3	7.5	7.6	7.6	7.6	7.6	7.5	7.5	6.46	8.07	7.2	7.2	7.67	7.83	7.28	7.74	7.2	7.47	**5.85**	**5.88**	7.23
Specific Conductance	umhos / cm	NE	13,200	13,400	29,300	29,600	12,400	11,400	17,920*	7,470	7,420	6,760*	6,280	13,570*	19,400	18,900	34,100	22,500	8,310	9,110	11,700	11,400	10,900	10,700	7,900	30,500	10,600	15,400	9,620	9,690	9,540	9,730
TDS	mg/L	1,000	**12,400**	**12,400**	**29,300**	**29,400**	**11,600**	**10,400**	**15,800**	**6,910**	**6,900**	**9,100**	**5,720**	**11,800**	**17,800**	**17,800**	**32,900**	**20,600**	**7,500**	**7,160**	**10,400**	**9,680**	**8,800**	**9,090**	**6,820**	**15,900**	**9,460**	**13,600**	**8,260**	**7,400**	**7,400**	**8,020**
Total organic carbon	mg/L	NE	ND	1.07	5.57	28.7	ND	ND	2.43	1.45	1.82	7.78	1.25	1.87	2.68	2.84	4.38	3.34	1.99	27.6	20.7	13.9	14.6	41.6	5.42	2.91	2.15	2.81	4.37	29.6	31.6	32.2
Dissolved Ions																																
Bromide	mg/L	NE	0.72	ND	3.72	3.64	ND	ND	1.63	ND	ND	0.94	ND	1.05	1.64	1.64	4.42	2.01	0.7	0.69	ND	0.73	0.9	0.68	ND	3.5	0.94	1.2	ND	0.8	0.79	ND
Chloride	mg/L	250	**1,240**	**1,160**	**5,890**	**5,980**	**810**	**892**	**2,300**	**489**	**500**	**982**	**367**	**1,200**	**2,190**	**2,240**	**6,640**	**3,250**	**476**	**595**	**804**	**692**	**935**	**627**	**613**	**5,550**	**1,210**	**2,420**	**559**	**706**	**698**	**645**
Fluoride	mg/L	1.6	ND	ND	ND	ND	ND	0.87	**3.23**	**3.95**	**3.92**	**5.15**	**3.72**	**3.36**	ND	ND	**4.32**	ND	**3.35**	ND	ND	ND	ND	**3.44**	ND	ND	**4.32**	ND	**3.97**	ND	ND	ND
Nitrate-N	mg/L	10	**35.7**	**27.9**	**146**	**152**	**14.3**	**30.4**	**80.5**	**22.2**	**22**	**12.7**	**12.9**	**47.9**	**73.8**	**74**	**173**	**97**	**13.6**	ND	**18.1**	6.79	**17.3**	ND	**12.1**	**160**	**42.4**	**68.4**	**8.97**	ND	ND	9.07
Sulfate	mg/L	600	**6800**	**6,660**	**14,000**	**14,000**	**6,990**	**5,740**	**7,480**	**3,860**	**3,970**	**5,140**	**3,340**	**6,520**	**9,350**	**8,990**	**12,800**	**9,600**	**4,680**	**3,050**	**4,540**	**2,810**	**3,830**	**3,100**	**3,340**	**13,200**	**4,610**	**6,660**	**4,380**	**2,740**	**2,820**	**3,320**
Nutrients																																
Total Phosphorous	mg/L	NE	ND	0.058	0.085	ND	0.131	ND	0.085	ND	ND	ND	ND	ND	0.167	0.12	0.174	0.09	ND	0.101	1.3	0.125	0.144	0.052	ND	ND	ND	0.075	ND	0.087	0.082	0.143
Total Kjeldahl Nitrogen	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.48	ND	5.04	5.88	ND	ND	ND	ND	ND	ND	5.04	ND	ND
Ammonia	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Metals																																
Aluminum	mg/L	NE	0.865	0.197	0.832	0.822	2.7	0.311	3.9	0.144	ND	ND	0.808	ND	0.102	ND	2.39	2.07	1.86	0.112	49.6	ND	ND	ND	ND	ND	0.301	0.125	ND	0.15	ND	ND
Arsenic	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.119	ND	0.172	0.359	0.061	ND	ND	ND	0.046	ND	0.022	0.022	ND
Barium	mg/L	NE	ND	0.032	ND	ND	ND	0.026	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.397	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.012	0.01	0.01	0.009	ND	0.005	ND	0.005	0.005	ND	ND	ND	0.005	0.005	ND	0.005	0.005	ND
Boron	mg/L	NE	1.56	2.2	7.96	8.05	1.79	1.35	4.42	2.89	2.94	6.48	2.83	5.37	5.88	5.86	6	3.05	4.67	8.24	8.51	7.58	8.73	8.84	4.65	3	1.96	1.78	5.98	9.18	9.21	6.47
Cadmium	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005	ND	ND	ND	ND	ND	ND	0.005	ND	ND	ND	ND
Chromium	mg/L	NE	ND	ND	1.54	1.04	ND	ND	0.15	ND	ND	ND	ND	ND	0.292	0.284	ND	1.37	ND	0.07	0.428	ND	ND	ND	ND	0.373	0.021	5.89	ND	0.034	0.23	ND
Cobalt	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.035	0.058	0.021	0.036	0.042	ND	ND	ND	ND	ND	ND	ND	ND
Copper	mg/L	NE	ND	ND	ND	0.065	ND	ND	ND	ND	ND	ND	ND	ND	0.037	0.034	0.041	0.033	ND	0.028	0.075	0.013	0.015	0.018	ND	0.016	ND	0.03	ND	0.023	0.018	ND
Iron	mg/L	NE	0.59	0.072	0.432	0.518	1.72	0.095	2.18	0.121	ND	0.191	0.772	0.177	ND	0.056	1.26	1.61	1.14	2.54	63.1	0.302	0.276	0.57	1.2	5.75	0.211	10.8	0.179	6.05	6	ND
Lead	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.039	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	mg/L	NE	ND	ND	ND	ND	ND	ND	0.032	ND	ND	0.231	ND	ND	ND	ND	ND	ND	0.026	0.933	0.61	0.274	0.414	0.678	0.202	0.186	ND	0.12	0.452	0.262	0.288	0.114
Mercury	mg/L	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0003	ND	ND	ND	ND	ND	ND	ND	ND
Molybdenum	mg/L	NE	0.066	0.218	1.28	0.92	0.167	0.315	0.331	0.168	0.17	0.214	0.139	0.473	0.957	0.929	1.35	0.412	0.242	0.085	0.471	0.657	0.852	0.106	0.106	0.313	0.152	0.064	0.329	0.054	0.053	0.137
Nickel	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.109	0.115	0.051	0.081	0.098	ND	1.13	0.243	0.468	ND	0.074	0.055	ND
Selenium	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.191	0.317	0.238	0.539	0.369	ND	ND	0.057	0.058	ND	ND	ND	0.251	0.084	0.121	ND	ND	ND	ND
Silica	mg/L	NE	53.7	25.5	23.6	21.6	41.4	57.8	31.5	25	24	16.3	27.7	31.5	30.6	32.5	20.7	36.5	29.5	39.2	71.2	39.4	42.9	45.3	44.2	14.2	32	49.1	36.8	52	50.2	34.8
Strontium	mg/L	NE	9.48	8.76	7.52	7.6	7.55	15.9	7.03	6.47	6.46	9.42	9.35	5.51	5.9	6	8.42	7.95	5.15	4.61	5	3.66	3.57	3.44	6.24	8.25	10.8	10.4	5.08	3.72	3.98	4.8
Tin	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	0.204	0.119	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/L	NE	0.026		0.04	0.041	0.031	0.03	ND	ND	ND	ND	ND	0.038	0.058	0.054	0.032	0.044	0.026	ND	0.11	0.074	0.162	0.039	ND	ND	ND	0.105	ND	ND	ND	ND
Zinc	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.026	0.27	ND	ND	ND	ND	ND	ND	ND	ND	0.025	ND	ND
Dissolved Metals																																
Aluminum	mg/L	5	ND	ND	ND	ND	ND	ND	ND	0.061	ND	ND	ND	ND	ND	ND	1.3	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	mg/L	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.059	ND	**0.17**	**0.137**	0.032	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003	ND	0.003	0.003	ND	ND	ND	0.003	0.003	ND	0.003	0.003	ND
Boron	mg/L	0.75	**1.33**	**1.81**	**7**	**7.16**	**1.63**	**1.08**	**4.39**	**2.85**	**2.85**	**5.7**	**2.69**	**5.32**	**5.2**	**3.98**	**3.28**	**1.75**	**4.53**	**7.78**	**8.49**	**6.96**	**8.35**	**8.28**	**4.35**	**2.88**	**1.9**	**1.66**	**5.96**	**9.08**	**9.14**	**6.31**
Chromium	mg/L	0.05	ND	ND	**1.08**	**1.04**	ND	ND	**0.15**	ND	ND	ND	ND	ND	**0.222**	**0.173**	ND	**0.776**	ND	ND	ND	ND	ND	ND	ND	**0.344**	ND	**0.247**	ND	ND	ND	ND
Chromium VI	mg/L	0.05	0.015	ND	**1.47**	**1.41**	0.046	ND	**0.263**	ND	ND	ND	ND	ND	**0.313**	**0.306**	**0.055**	**1.61**	ND	0.038	ND	0.026	0.037	ND	ND	ND	ND	**0.386**	0.034	**0.097**	**0.137**	**0.093**
Cobalt	mg/L	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.035	ND	ND	ND	ND	ND	ND	ND	ND
Iron	mg/L	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.51	0.702	0.906	ND	**1.28**	0.191	0.286	0.234	0.222	**1.14**	**5.7**	ND	ND	0.111	**3.63**	**3.75**	ND
Manganese	mg/L	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.229**	ND	ND	ND	ND	ND	ND	ND	**0.931**	0.066	**0.244**	**0.299**	**0.61**	**0.2**	0.166	ND	0.109	**0.428**	**0.254**	**0.275**	0.114
Molybdenum	mg/L	1	0.065	0.151	0.891	0.896	0.165	0.229	0.331	0.157	0.166	0.207	0.14	0.469	0.718	0.56	0.706	0.228	0.234	ND	0.089	0.657	0.727	0.104	0.106	0.133	0.146	ND	0.309	ND	ND	0.1
Nickel	mg/L	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.068	ND	0.049	0.053	0.098	ND	**1.03**	**0.234**	**0.452**	ND	0.047	0.047	ND
Selenium	mg/L	0.05	ND	ND	ND	ND	ND	ND	**0.123**	ND	ND	**0.05**	ND	**0.085**	**0.126**	0.01	**0.196**	**0.122**	ND	ND	ND	ND	ND	ND	ND	**0.136**	**0.078**	**0.118**	ND	ND	ND	ND
Silica	mg/L	NE	48	22.9	23.4	18.9	36.6	48.7	29.2	24.2	23.8	15.2	24.7	30.6	24.6	20.1	10.7	22.1	29.2	35.9	44.4	37.9	39.5	43.5	41	14	31.7	44.8	35	47.5	47.9	32.7
Strontium	mg/L	17 (HA)	9.44	7.04	7.41	7.57	7.53	8.61	6.94	6.41	6.39	9.21	9.14	5.27	5.86	5.92	8.36	7.01	5.01	4.34	4.58	2.63	3.42	3.29	5.65	7.74	9.73	9.6	4.95	3.54	3.5	4.42
Vanadium	mg/L	0.02 (HA)	ND	ND	**0.04**	**0.038**	**0.025**	ND	**0.035**	ND	ND	ND	ND	**0.035**	**0.036**	**0.026**	ND	ND	ND	ND	ND	**0.142**	**0.081**	**0.033**	ND	ND	ND	ND	ND	ND	ND	ND
Dissolved Salts																																
Calcium	mg/L	NE	430	411	424	415	395	426	317	442	4.39	460	477	269	379	381	465	440	422	201	136	87.1	145	164	301	416	481	470	259	131	131	192
Lithium	mg/L	NE	0.597	0.652	1.06	1.04	0.566	0.468	ND	1.35	1.33	0.815	0.545	0.494	0.57	0.417	0.565	0.515	0.451	0.474	0.525	0.257	0.382	0.303	0.427	0.815	0.492	0.64	0.36	0.365	0.354	0.403
Magnesium	mg/L	NE	564	467	1,710	1,680	461	427	590	361	360	567	401	474	670	664	1310	949	354	268	373	253	373	251	302	1530	464	613	275	300	299	353
Potassium	mg/L	NE	81	75.1	227	226	76.6	64.9	113	87.2	87.1	138	88.9	106	121	122	221	137	92.5	52.1	103	63.4	88.7	90.4	78.5	198	105	95.7	85.7	69.1	70	62.6
Sodium	mg/L	20 (HA)	**1920**	**2120**	**4,560**	**4,450**	**1,940**	**1,720**	**2,560**	**771**	**742**	**1,090**	**524**	**1,700**	**3080**	**3110**	**6060**	**3660**	**832**	**1610**	**1960**	**1680**	**2050**	**1930**	**1030**	**5120**	**1300**	**2110**	**1430**	**1670**	**1680**	**2310**
Volatile Organics																																
1,1-Dichloroethane	ug/L	25	ND	ND	ND	ND	ND	ND	1.9	ND	ND	3.91	ND	ND	ND	ND	ND	ND	ND	**27.2**	24.1	**32.7**	**31**	**123**	12.3	ND	ND	ND	ND	23	21.4	**49.5**
1,1-Dichloroethene	ug/L	5	ND	ND	4.16	3.99	ND	ND	ND	ND	ND	ND	ND	MD	1.55	1.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	76	17.9	60.7	45.9	ND	ND	ND	ND	ND	ND	30.1	29.6	95.5
1,3,5-Trimethylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16.4	ND	20.4	16.1	ND	ND	ND	ND	ND	ND	ND	5.9	27.6
Benzene	ug/L	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**19.3**	**34**	**10.5**	**10.6**	**12.3**	1.57	ND	ND	ND	2.92	**26.7**	**25.4**	**34.6**
Carbondisulfide	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.35
Chloroform	ug/L	100	ND	ND	1.62	1.54	ND	ND	1.66	1.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.22	ND	3.25	ND	ND	ND	ND	ND
Ethylbenzene	ug/L	750	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9	5.8
Isopropylbenzene	ug/L	4 (HA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**14.8**	ND	ND	ND	ND	2.3	ND	ND	ND	**6.31**	ND	**5.95**	**9.4**
Methyl-tert-Butyl Ether	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND
Naphthalene	ug/L	300 (HA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	163	51.5	ND	ND	ND	5.88	ND	ND	ND	70.3	98.3	155	61.8
n-Butylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.25	ND	ND	ND	ND	ND	ND	ND	ND	1.25	ND	ND	ND
n-Propylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.35	5.75

Water Quality Parameters			SWMUs 38 and 39						SWMU 143											SWMU 154												
Analyte	**Unit**	**NMWQCC Std**	**HMW-29**	**HMW-32**	**HMW-33**	**HMW-33 QC**	**HMW-34**	**HMW-35**	**HMW-11**	**HMW-13**	**HMW-13 QC**	**HMW-36**	**HMW-37**	**HMW-38**	**HMW-39**	**HMW-39 QC**	**HMW-40**	**HMW-41**	**HMW-43**	**DRW-1**	**DRW-2**	**DRW-3**	**DRW-3 QC**	**DRW-4**	**DRW-5**	**DRW-12**	**DRW-13**	**DRW-16**	**HCF-1**	**HCF-5**	**HCF-5 QC**	**HCF-7**
p-Isopropyltoluene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8
Sec-Butylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.3	ND	ND	ND	ND	1.59	ND	ND	ND	4.86	ND	ND	9.3
Toluene	ug/L	750	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ug/L	100	ND	ND	6.57	5.96	ND	ND	43.8	ND	ND	ND	ND	10.6	63.4	63.3	ND	**131**	ND	ND	ND	ND	ND	ND	ND	9.39	2.59	68.3	ND	ND	ND	ND
Semi Volatile Organic Compounds																																
1-Methylnaphthalene	mg/L	TOX	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35	0.087	0.0702	0.0536	0.0115	0.0056	ND	ND	ND	0.0733	9.09	7.52	0.116
2-Methylnaphthalene	mg/L	TOX	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.407	0.0967	0.0548	0.0459	0.0108	ND	ND	ND	ND	0.0839	11.7	9.58	0.122
Acenaphthene	mg/L	2 (HA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0355	0.0083	ND	ND	ND	ND	ND	ND	ND	ND	0.76	0.697	0.0067
Acetophenone	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	mg/L	10 (HA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.186	0.00909	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.168	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0.158	0.0076	0.0077	0.0123	ND	ND	ND	ND	0.0078	ND	ND	0.0128
Diphenylamine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.02	MD	ND
Fluorene	mg/L	tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.051	0.0144	0.006	0.0068	ND	ND	ND	ND	ND	ND	1.4	ND	0.0118
Naphthalene	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17	0.0382	0.0226	0.0175	0.0094	ND	ND	ND	ND	0.0253	2.09	1.76	0.0581
Pentachlorophenol	mg/L	tox	ND	ND	ND	ND	ND	ND	ND	0.00938	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.151	0.0245	0.0055	0.0084	ND	ND	ND	ND	ND	0.0072	2.79	2.56	0.0148
Phenol	mg/L	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00673	ND	ND	0.00571	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/L	tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.378	ND	ND
Pesticides																																
Toxaphene	mg/L	tox	ND	ND	ND	ND	**0.0267**	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Petroleum Hydrocarbons																																
DRO	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	359	66	8.66	8.34	ND	ND	ND	ND	ND	ND	24.7	48.1	285
GRO	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.216	0.224	0.197	0.281	ND	0.63	0.299	0.71	0.436	0.259	ND	ND	ND	ND	ND	1.41	0.392	0.956

ATTACHMENT 2

DETECTED ANALYTES – JULY/AUGUST 2004
HELSTF GROUNDWATER SAMPLING EVENT

ATTACHMENT 2
Detected Analytes for the July/August 2004 HELSTF Groundwater Sampling Event.

Carbonate Alkalinity			SWMUs 38 and 39						SWMU 143										SWMU 154												
Analyte	**Unit**	**NMWQCC Std**	**HMW-29**	**HMW-32**	**HMW-33**	**HMW-33 QC**	**HMW-34**	**HMW-35**	**HMW-11**	**HMW-13**	**HMW-36**	**HMW-37**	**HMW-38**	**HMW-39**	**HMW-39 QC**	**HMW-40**	**HMW-41**	**HMW-43**	**DRW-1**	**DRW-2**	**DRW-3**	**DRW-3 QC**	**DRW-4**	**DRW-5**	**DRW-12**	**DRW-13**	**DRW-16**	**HCF-1**	**HCF-5**	**HCF-5 QC**	**HCF-7**
Bicarbonate Alkalinity	mg/L	NE	212	162	178	180	178	170	202	148	588	144	152	176	174	132	256	146	2060	1760	2230	986	2730	666	220	194	194	284	2510	2500	1280
Carbonate Alkalinity	mg/L	NE	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hydroxide Alkalinity	mg/L	NE	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Alkalinity	mg/L	NE	212	162	178	180	178	170	202	148	588	144	152	176	174	132	256	146	2060	1760	2230	986	2730	666	220	194	194	284	2510	2500	1280
Dissolved Ions																															
Bromide	mg/L	NE	0.66	ND	3.7	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	0.7	ND	1	ND	ND	ND	ND	0.89	ND	ND	ND	ND	0.7
Chloride	mg/L	250	**1170**	**1170**	**5580.0**	**5790**	**800**	**925**	**2360**	**506**	**952**	**328.0**	**1160**	**2160**	**2160**	**6430.0**	**3060.0**	**462.0**	**587**	**678.0**	**806**	**787**	**576**	**652.00**	**4940**	**1360**	**2530**	**558**	**711**	**702.00**	**640**
Fluoride	mg/L	1.6	ND	ND	ND	ND	ND	ND	ND	3.68	4.76	3.7	ND	0.264	0	ND	ND	3.4	ND	ND	0	ND	0.53	0.31	ND	4.17	ND	3.95	ND	ND	ND
Nitrate-N	mg/L	10	**35.4**	**28**	**147.0**	**150**	**14.5**	**23.2**	**82.2**	**26**	5.78	**12.2**	**42.3**	**71.6**	**72**	**177.0**	**96.3**	**13.0**	ND	**10.7**	11	**11.5**	ND	**13.30**	**149**	**44.4**	**74.1**	**15.4**	ND	10.70	**10.9**
Nitrite-N	mg/L		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfate	mg/L	600	**6410**	**6380**	**12500**	**13000**	**6730**	**5500**	**7230**	**3830**	**4810**	**3160.0**	**6240**	**8740**	**8900**	**12000.0**	**9380**	**4360.0**	**3030**	**4140.0**	**3380**	**3380**	**2950**	**3550.00**	**11800**	**4810**	**6500**	**4820**	**2800**	**2800.00**	**3900**
Dissolved Metals																															
Dissolved Aluminum	mg/L	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.544	ND	0.03	ND	ND	ND	0.466	0.48	ND
Dissolved Arsenic	mg/L	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.342	0.381	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dissolved Barium	mg/L	NE	0.014	0.013	0.012	0.012	0.024	0.012	ND	0.019	0.032	0.016	0.015	0.013	0.013	0.0	0.012	0.014	0.035	0.033	0.082	0.083	0.019	0.031	0.025	0.021	0.011	0.025	0.048	0.05	0.054
Dissolved Beryllium	mg/L	0.75	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005	ND	ND	ND	ND	ND	0.006	ND	0.004	ND	ND	ND
Dissolved Boron	mg/L	0.05	**1.43**	**1.6**	**7.53**	**7.5**	**1.87**	**7.53**	**5.54**	**3.43**	**8.26**	**3.13**	**5.8**	**6.54**	**6.53**	**5.3**	**2.98**	**5.02**	**8.26**	**7.85**	**8.45**	**8.57**	**10.8**	**4.11**	**3.49**	**2.45**	**1.97**	**6.4**	**8.43**	**8.44**	**6.48**
Dissolved Cadmium	mg/L	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.031	ND	ND	ND	ND	ND	ND	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.043	0.04	ND
Dissolved Chromium	mg/L	0.05	ND	ND	**1.17**	**1.19**	ND	**1.17**	**0.21**	ND	ND	**0.195**	0.031	**0.276**	**0.281**	0.0	**1.3**	ND	ND	0.007	ND	ND	ND	ND	0.004	ND	**0.446**	ND	ND	ND	ND
Chromium, Hexavalent	mg/L	0.05	ND	ND	**1.41**	**1.40**	**1.4**	ND	**0.22**	ND	ND	ND	**0.305**	**0.31**	**0.30**	0.02	**1.46**	ND	ND	ND	**0.053**	0.06	ND	ND	ND	ND	**0.37**	ND	**0.06**	0.03	**0.05**
Dissolved Cobalt	mg/L	0.05	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.016	0.003	0.017	0.008	**0.053**	0.005	0.011	ND	ND	ND	ND	ND	ND
Dissolved Copper	mg/L	1	ND	0.115	0.026	0.026	ND	0.026	ND	ND	ND	ND	ND	0.017	0.016	0.0	0.028	0.035	ND	0.034	ND	ND	ND	ND	0.021	0.01	0.015	0.012	0.087	0.09	ND
Dissolved Iron	mg/L	1	ND	ND	ND	ND	0.015	ND	ND	ND	0.146	ND	0.072	ND	**1.69**	ND	ND	ND	**2.12**	0.019	0.189	0.184	0.335	0.19	0.901	0.364	ND	0.196	**5.58**	**5.67**	0.016
Dissolved Lead	mg/L	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dissolved Manganese	mg/L	0.05	ND	0.005	0.008	ND	0.028	0.008	ND	0.002	**0.597**	0.02	ND	ND	0.005	ND	ND	ND	**1.29**	**0.11**	**0.545**	**0.551**	**0.941**	**0.26**	**0.067**	**0.185**	**0.046**	**0.929**	**0.391**	**0.40**	**0.131**
Dissolved Molybdenum	mg/L	1	0.081	0.142	**1.15**	**1.13**	0.198	**1.15**	0.395	0.219	0.267	0.388	0.531	0.873	0.875	**1.4**	0.467	0.282	0.038	0.106	0.378	0.337	ND	0.118	0.439	0.172	ND	0.443	0.145	0.16	0.158
Dissolved Nickel	mg/L	0.2	0.008	ND	0.01	ND	ND	0.01	ND	ND	ND	**0.218**	0.03	ND	ND	ND	0.011	0.009	0.091	0.027	0.068	0.056	0.096	0.008	**1.28**	**1.27**	**0.583**	**0.014**	0.11	0.11	0.022
Dissolved Selenium	mg/L	NE	ND	ND	0.559	0.581	ND	0.559	ND	ND	ND	ND	ND	ND	ND	0.3	0.199	ND	ND	0.437	ND	ND	ND	ND	0.153	ND	ND	ND	ND	ND	ND
Dissolved Silica	mg/L	NE	41.9	25.8	18.5	18.5	31.1	18.5	35.9	24.5	24.2	30.5	33.9	32.7	32.8	13.1	32.5	32	44.1	50.9	46.9	47.3	55.8	39	18.4	25.5	44.9	37.8	48.7	49.30	37.6
Dissolved Silver	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dissolved Strontium	mg/L	NE	10.1	8.17	9.63	9.62	8.79	9.63	6.94	8.65	9.95	8.05	5.88	6.75	6.62	9.9	9.22	5.24	4.8	4.56	4.48	4.5	3.37	6.76	10.7	10.8	11.7	5.2	4.21	4.10	5.11
Dissolved Tin	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.123	0.017	ND	ND	ND	ND	ND	ND	ND	ND	0.016	0.02	ND
Dissolved Vanadium	mg/L	NE	0.021	0.014	0.032	0.034	0.023	0.032	ND	0.026	0.007	ND	0.036	0.036	0.036	ND	0.024	0.022	ND	0.013	0.029	0.027	0.032	0.015	ND	0.004	0.005	0.024	0.027	0.06	ND
Dissolved Zinc	mg/L	10	ND	0.004	ND	ND	ND	ND	0.021	0.029	0.014	0.176	0.018	0.016	0.013	ND	ND	0.013	ND	0.003	0.012	0.008	0.098	0.01	0.016	0.013	0.01	0.01	0.343	0.03	ND
Total Metals																															
Total Aluminum	mg/L	NE	ND	0.017	ND	ND	ND	ND	0.337	0.785	0.617	0.543	0.573	ND	ND	0.4	0.085	0.52	ND	0.105	ND	ND	ND	ND	0.03	0.149	ND	ND	ND	ND	ND
Total Arsenic	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.364	0.227	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Barium	mg/L	NE	0.016	0.017	0.011	0.011	0.023	0.011	ND	ND	0.016	ND	ND	0.013	0.01	0.0	0.013	0.014	0.029	0.042	0.087	0.095	ND	0.032	0.025	0.023	0.012	0.029	0.015	0.02	0.053
Total Beryllium	mg/L	NE	ND	0.001	ND	ND	ND	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.004	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Boron	mg/L	NE	1.63	1.63	7.45	7.42	1.79	7.45	4.67	3.76	8.16	3.56	6.13	6.37	6.39	5.1	2.92	4.49	6.7	7.4	7.8	7.42	9.61	3.9	3.49	2.3	1.96	6.14	4.96	6.30	5.57
Total Cadmium	mg/L	NE	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00	0.002
Total Chromium	mg/L	NE	ND	0.009	1.15	1.12	ND	1.15	0.18	0.005	ND	ND	0.027	0.28	0.28	0.01	1.28	ND	ND	0.015	ND	ND	0.008	ND	0.004	1.08	1.44	0.006	ND	ND	ND
Total Cobalt	mg/L	NE	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.019	ND	0.012	0.013	ND	ND	0.011	0.014	0.008	ND	ND	ND	ND
Total Copper	mg/L	NE	0.012	0.117	0.041	0.024	0.01	0.041	0.042	0.019	0.034	0.056	0.031	0.005	ND	ND	0.031	0.028	ND	ND	0.005	0.004	ND	0.003	0.021	0.03	0.092	0.045	ND	ND	0.012
Total Iron	mg/L	NE	0.007	0.021	0.084	0.445	0.027	0.084	0.267	0.222	7.02	0.029	ND	ND	0.10	0.2	0.123	0.365	2.04	0.194	0.232	0.17	0.599	0.835	0.901	2.46	3.29	0.537	4.21	5.42	0.019
Total Lead	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Manganese	mg/L	NE	0.003	0.005	ND	ND	0.021	ND	ND	ND	0.616	ND	ND	ND	ND	0.0	0.002	0.012	1.25	0.136	0.544	0.515	0.903	0.245	0.067	0.211	0.101	0.967	0.271	0.35	0.131
Total Molybdenum	mg/L	NE	0.071	0.147	1.08	1.06	0.172	1.08	0.352	0.227	0.206	0.185	0.528	0.939	0.93	1.3	0.464	0.239	0.042	0.142	0.374	0.266	0.109	0.137	0.439	0.213	0.043	0.526	0.045	0.08	0.174
Total Nickel	mg/L	NE	ND	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND	0.012	0.003	0.088	0.028	0.07	0.064	0.169	0.012	1.28	1.42	0.867	0.02	0.071	0.09	0.012
Total Phosphorous	mg/L	NE	ND	0.032	ND	ND	0.072	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.046	0.119	0.075	0.087	0.026	0.035	0.153	ND	ND	ND	ND	ND	0.09
Total Selenium	mg/L	NE	0.087	0.042	0.476	0.501	ND	0.476	ND	ND	ND	ND	ND	ND	ND	0.2	0.194	ND	ND	ND	ND	ND	ND	ND	18.4	ND	ND	ND	ND	ND	ND
Total Silica	mg/L	NE	45.9	26	17.5	17.8	30	17.5	27.2	23.6	20.9	25	30.3	33.5	33.40	12.4	30.4	26.1	34.3	41.3	42.7	35.9	46.8	28.2	ND	26.3	40.9	31	30	39.10	32.4
Total Silver	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.7	ND	ND	ND	ND	ND	ND
Total Strontium	mg/L	NE	10.7	9.25	8.8	8.91	8.3	8.8	6.32	8.31	8.67	7.95	5.02	6.8	6.76	9.5	9	5.05	4.67	4.64	4.56	4.54	3.56	6.8	ND	11.2	11.7	5.48	3	3.97	5.3
Total Tin	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	0.108	0.098	0.106	0.076	ND	ND	ND	ND	ND	ND	ND	0.024	0.102	0.037	ND	ND	0.18	ND	ND	ND	ND	ND
Total Vanadium	mg/L	NE	0.021	0.017	0.031	0.032	0.021	0.031	0.039	0.029	0.035	0.02	0.04	0.035	0.04	ND	0.025	0.025	0.005	0.008	0.028	0.02	0.032	0.021	0.016	0.015	0.029	0.03	0.003	0.00	0.005
Total Zinc	mg/L	NE	0.004	0.008	ND	ND	0.005	ND	ND	0.038	ND	ND	ND	0.013	0.01	ND	0.01	ND	0.018	0.021	0.013	0.014	0.018	0.059	0.03	0.021	0.018	0.013	0.014	0.01	0.019
Dissovled Salts																															
Dissolved Calcium	mg/L	NE	464	384	484	481	423	484	352	514	484	462	306	NA	NA	476.0	415	467	223	169	183	183	162	367	502	523	528	311	200	197.00	207
Dissolved Lithium	mg/L	NE	1.03	0.459	2.19	2.2	1.28	2.19	0.977	0.97	1.58	0.654	1.14	1.15	1.13	1.8	1.53	0.908	0.839	0.511	0.803	0.805	0.437	N/A	1.69	N/A	N/A	N/A	0.343	0.33	0.809
Dissolved Magnesium	mg/L	NE	689	455	2260	2220	502	2260	791	453	626	379	538	NA	NA	1570.0	986	401	327	403	400	401	290	358	1710	570	811	349	370	366.00	414
Dissolved Potassium	mg/L	NE	80.7	61.6	282	279	73.6	282	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	61.1	105	103	105	101	94.3	247	134	133	108	82	80.50	68
Dissolved Sodium	mg/L	20 (HA)	**2380**	**1860**	**4350**	**4310**	**2100**	**4350**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1700	2080	2140	2200	2310	1200	5200	1660	2560	1880	1710	1720.00	1610
Explosives																															
1,3,5-Trinitrobenzene	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dinitrobenzene	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.66
2,6-DNT / 2,4-DNT	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.453	0.286	ND	ND	ND	ND	0.702	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.1	38.50	25.1
2-NT	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.21	7.21	ND	ND	ND	ND	ND	8.44
3-NT	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	56.3

Carbonate Alkalinity			SWMUs 38 and 39						SWMU 143										SWMU 154												
Analyte	Unit	NMWQCC Std	HMW-29	HMW-32	HMW-33	HMW-33 QC	HMW-34	HMW-35	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-39 QC	HMW-40	HMW-41	HMW-43	DRW-1	DRW-2	DRW-3	DRW-3 QC	DRW-4	DRW-5	DRW-12	DRW-13	DRW-16	HCF-1	HCF-5	HCF-5 QC	HCF-7
4-amino-DNT / 2-amino-DNT	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	40.2	ND	ND
4-NT	ug/L	Tox	0.84	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HMX	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	627	ND	ND	ND	ND	ND	ND	ND	**492**	**354**	**304**	**5790**	**2100**	**90.4**	90.4	ND	ND	2.87	**396**	**334.00**	**129**
Nitrobenzene	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.1
RDX	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	234	ND	ND	ND	ND	ND	ND	ND	ND	ND	84.6	52.30	74.9
Tetryl	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TNT	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54.6
Mercury																															
Total Mercury	mg/L	0.002	ND	0.00013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides																															
Aldrin	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
alpha-BHC	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
alpha-Chlordane	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
beta-BHC	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
delta-BHC	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan I	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan II	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan sulfate	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin aldehyde	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin Ketone	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gamma-BHC (Lindane)	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gamma-Chlordane	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor Epoxide	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methoxychlor	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
p,p-DDD	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
p,p-DDE	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
p,p-DDT	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Technical Chlordane	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	ug/L	Tox	ND	ND	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Volatiles																															
1,1,1,2-Tetrachloroethane	ug/L	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/L	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/L	25	ND	ND	0.27	0.28	ND	0.28	1.86	ND	4.6	ND	ND	ND	ND	0.54	1.1	0.06	**37.9**	**71.7**	**48.1**	**47.80**	**125**	8.65	0.64	ND	0.47	ND	15.7	15.50	**64**
1,1-Dichloroethene	ug/L	5	ND	ND	**6.09**	**5.72**	ND	**5.72**	0.75	ND	ND	ND	ND	1.59	1.65	ND	4.5	ND	1.52	ND	1.31	1.48	3.56	0.27	ND	ND	**6.85**	ND	ND	0.70	ND
1,1-Dichloropropene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.41	48.4	9.46	9.26	ND	ND	ND	1.13	ND	ND	13.3	13.40	68.5
1,2-Dibromo-3-chloropropane	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	ug/L	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene (ortho)	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	ug/L	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.44	12.1	7.59	7.59	ND	ND	ND	ND	ND	ND	2.9	2.70	20
1,3-Dichlorobenzene (meta)	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene (para)	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35	3
2-Hexanone	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/L	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**30.3**	**60.2**	**10.7**	**10.50**	5.94	1.46	ND	ND	0.43	1.52	**38.7**	**37.20**	**46.5**
Bromobenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/L	NE	ND	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane (methyl bromide)	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/L	100	ND	ND	2.1	2.11	ND	2.11	1.4	1.07	ND	ND	ND	1.01	1	ND	2.15	ND	ND	1.6	1.22	1.24	ND	2.19	0.76	2.79	0.92	0.29	ND	ND	ND
Chloromethane (methyl chloride)	ug/L	Tox	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	1.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Carbonate Alkalinity			SWMUs 38 and 39						SWMU 143										SWMU 154												
Analyte	Unit	NMWQCC Std	HMW-29	HMW-32	HMW-33	HMW-33 QC	HMW-34	HMW-35	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-39 QC	HMW-40	HMW-41	HMW-43	DRW-1	DRW-2	DRW-3	DRW-3 QC	DRW-4	DRW-5	DRW-12	DRW-13	DRW-16	HCF-1	HCF-5	HCF-5 QC	HCF-7
cis-1,2-Dichloroethene	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.09	ND	ND	ND	ND
Dibromomethane (methylene bromide)	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/L	750	ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.55	5.3	0.85	0.85	0.43	0.05	ND	ND	ND	ND	4.5	4.00	9
Hexachlorobutadiene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane (methyl iodide)	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	1.39	ND	ND	ND	ND	ND	ND	ND	**4.81**	9.7	**4.02**	**4.10**	**4.31**	0.81	ND	ND	ND	**6.68**	3.8	3.90	**7**
m,p-Xylene	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29	3	0.31	0.30	0.13	ND	ND	ND	ND	ND	1.7	1.15	9
Methylene chloride	ug/L	100	ND	ND	ND	0.73	ND	0.73	ND	ND	ND	ND	ND	ND	ND	ND	7.95	ND	ND	11.9	ND	ND	ND	ND	ND	ND	ND	ND	12	5.35	ND
MTBE	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.4	ND	4.86	4.86	8.7	ND	ND	ND	0.28	ND	4.5	4.85	ND
Naphthalene	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	3.08	ND	ND	ND	ND	ND	ND	ND	53.4	106	22.4	22.00	3.87	0.92	ND	2.67	ND	32.4	110	67.60	242
n-Butylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.84	4.7	1.34	1.42	ND	0.17	ND	ND	ND	1.68	2.4	2.30	4.5
n-Propylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.53	5.8	1.15	1.16	0.58	0.13	ND	ND	ND	0.31	4.5	4.40	5
o-Xylene	ug/L	620	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38	3	0.41	0.43	0.27	ND	ND	ND	ND	0.25	1.3	0.85	6
p-Isopropyltoluene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71	3	3.15	3.19	ND	ND	ND	ND	ND	ND	1.1	1.20	5.5
sec-Butylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	1.72	ND	ND	ND	ND	ND	ND	ND	5.68	6.3	5.27	5.28	4.15	0.49	ND	ND	ND	6.15	4.7	4.70	8
Styrene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (PCE)	ug/L	Tox	ND	ND	0.8	0.68	ND	0.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ug/L	750	0.06	0.08	ND	0.08	ND	0.08	ND	ND	ND	ND	ND	0.2	ND	ND	0.7	ND	0.5	4	0.25	0.22	0.45	ND	ND	ND	ND	ND	3.5	1.95	22
trans 1,4-Dichloro-2-butene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (TCE)	ug/L	100	ND	ND	9.06	8.21	ND	8.21	42.2	ND	ND	ND	10.8	67.1	67.7	1	**202**	0.2	ND	ND	2.3	2.36	ND	0.19	19.7	4.65	**104**	ND	ND	ND	ND
Trichlorofluoromethane	ug/L	Tox	ND	ND	0.88	0.83	ND	0.83	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38	ND	ND	ND	ND
Vinyl Chloride	ug/L	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semi-Volatiles																															
1,2,4,5-Tetrachlorobenzene	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene (ortho)	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene (meta)	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene (para)	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Chloronaphthalene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00201	0.00201	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.086	0.086	0.0592	0.04	ND	ND	ND	ND	ND	0.0816	0.26	0.60	**26.6**
1-Naphthylamine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00228	0.00228	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dichlorophenol	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0444	0.0444	0.0503	0.02	ND	ND	ND	ND	ND	0.0917	0.25	0.69	**26.3**
2-Methylphenol	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Naphthylamine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Picoline	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3-Dichlorobenzidine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Methylcholanthrene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00276	0.00276	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Aminobiphenyl	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00318	0.00318	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol / 3-Methylphenol	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00398	0.00398	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7,12-Dimethylbenz(a)anthracene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
a,a-Dimethylphenethylamine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/L	2 (HA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00457	0.00457	0.00395	0.00	ND	ND	ND	ND	ND	0.00373	0.0145	0.04	ND
Acenaphthylene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	mg/L	10 (HA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00856	0.00856	ND	ND	ND	ND	ND	ND	ND	ND	0.00594	0.02	0.316
Benzidine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Carbonate Alkalinity			SWMUs 38 and 39						SWMU 143										SWMU 154												
Analyte	**Unit**	**NMWQCC Std**	**HMW-29**	**HMW-32**	**HMW-33**	**HMW-33 QC**	**HMW-34**	**HMW-35**	**HMW-11**	**HMW-13**	**HMW-36**	**HMW-37**	**HMW-38**	**HMW-39**	**HMW-39 QC**	**HMW-40**	**HMW-41**	**HMW-43**	**DRW-1**	**DRW-2**	**DRW-3**	**DRW-3 QC**	**DRW-4**	**DRW-5**	**DRW-12**	**DRW-13**	**DRW-16**	**HCF-1**	**HCF-5**	**HCF-5 QC**	**HCF-7**
Benzo(a)anthracene	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0352
Benzo(a)pyrene	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic acid	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethoxy)methane	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethyl)ether	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl)phthalate	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0077	0.0077	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.115
Dibenzo(a,h)anthracene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,j)acridine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0111	0.0111	0.00758	ND	ND	ND	ND	ND	ND	0.00871	ND	ND	ND
Diethylphthalate	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diphenylamine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diphenylhydrazine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00439	0.00439	0.00517	0.00	ND	ND	ND	ND	ND	ND	0.0292	0.10	ND
Hexachlorobenzene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00199	0.00199	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/L	Tox	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0217	0.0217	0.0138	0.00	0.00173	ND	ND	ND	ND	0.0234	0.0568	0.13	4.63
Nitrobenzene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Nitrosodimethylamine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Nitroso-di-n-butylamine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00425	0.00425	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Nitrosopiperidine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Dimethylaminoazobenzene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorobenzene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachloronitrobenzene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenacetin	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00972	0.00972	0.00545	0.00	ND	ND	ND	ND	ND	0.0113	0.0471	0.16	**3.75**
Phenol	mg/L	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pronamide	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00399	ND	0.323
Pyridine	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Specific Conductance pH																															
pH	s.u.	6.0-9.0	7.37	7.59	7.46	7.47	7.45	7.5	7.5	7.8	7.2	7.8	7.6	7.6	7.6	7.6	7.4	7.7	7.0	7.1	7.2	7.1	7.1	7.2	7.4	7.1	7.3	7.3	7.0	7.0	7.0
PH - Conductivity	µMHOS/cm		12900	13100	29300	29400	12400	11600.0	17400	5480	10100	5480	13300	18300	16300	35200	21300	7780	8940	10100	10400	12400.00	10000	7930	2840	11000	15600	9060	9430	9370.00	9150
Miscl Other																															
Ammonia	mg/L	NE	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.06	ND	ND	1.40	1.06	ND	ND	ND	ND	ND	ND	ND	ND
Ammonium Perchlorate	mg/L	NE		0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids	mg/L	1000	**12300**	**11900**	**29900**	**30000**	**11200**	**10300**	**16200**	5780	9640	5780	**11900**	**17500**	**17000**	**34700**	**21000**	7630	7410	8910	8570	**11800.00**	8200	7070	27900	**10100**	**14200**	8730	7640	7680.00	7970
Total Kjeldahl Nitrogen - N	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Organic Carbon	mg/L	NE	ND	ND	3.4	4.01	ND	ND	1.6	1.04	7.01	ND	1.33	1.59	1.76	5.18	2.45	ND	13	10.1	10.7	8.29	366	4.88	2.09	ND	ND	2.87	23.5	22.90	9.85
Petroluem																															
DRO	mg/L	NE	ND	ND	ND	ND	ND	ND	0.62	ND	0.58	ND	0.55	ND	ND	ND	ND	0.66	2	19.1	1.45	1.31	1.24	ND	ND	ND	ND	16.2	3.21	2.74	3.23
GRO	mg/L	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0327	0.0265	ND	0.102	ND	0.061	0.585	0.0664	0.07	0.0795	ND	ND	ND	0.0453	ND	0.226	0.25	0.211

ND = Not Detected or Below the reference method dection limits

Tox = toxic pollutant

NOTE: NM Water Quality Standards for Grounwater with 10,000 mg/l of TDS or Less

APPENDIX A
SAMPLING PROCEDURES

SAMPLING 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 labels 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^{o} 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 B

PURGE AND DECONTAMINATION WATER DISPOSAL

PURGE AND DECONTAMINATION WATER DISPOSAL

The Hazardous Waste Minimization Center (HWMC) is responsible for disposal of all waste from the White Sands Missile Range (WSMR). The center makes the final waste determination for all waste streams using information provided by their customers. The center is the repository for all of the waste determination analytical data, waste profiles, manifests and certificates of disposal for the WSMR. Accordingly, BAE SYSTEMS delivers all purge water collected from ground water sampling to the HWMC for proper disposal.

BAE SYSTEMS may transport hazardous and non-hazardous waste within the boundaries of the White Sands Missile Range without a manifest, bill of lading, placarding, DOT container marking or Hazardous Material Transporter registration. BAE SYSTEMS may also cross non-range roads to transport hazardous and non-hazardous waste between contiguous properties of WSMR, without being subject to the DOT Hazardous Materials Regulations or the Uniform Hazardous Waste Manifest (the manifest) requirements of RCRA (G. Forsythe, 2002).

BAE SYSTEMS will not transport the waste along non-range roads, even within the boundaries of the WSMR. If this is necessary, BAE SYSTEMS shall require these transportation services be provided by the HWMC.

BAE SYSTEMS' purge water handling is as follows:

Purge water and decontamination water are collected in 55-gallon drums during each sampling event. The containers are labeled and marked according to the Standard Operating Procedure, Management of Investigation-Derived Waste, BAE-SOP 14.0. The amount of purge water collected is recorded in the field logbook.

Composite waste characterization samples are collected annually and submitted for analysis. The BAE Systems chemist reviews the laboratory results to characterize the waste as hazardous or non-hazardous. The results are submitted to the HWMC for waste profiling and waste acceptance. Results of chemical analysis from individual wells are reviewed throughout the year to determine if there have been any significant changes.

APPENDIX C

CHEMICAL ANALYTICAL DATA
February 2004 SAMPLING EVENT
July/ August 2004 SAMPLING EVENT
on CD only

Work Order Receipt

Order

Work Order	4021016
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 FF
	Project Name = HELSTF Chrome
	Project Number = 20 FF
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
27118	HLSF-0143-HMW-013-0204	Normal	water	2004-02-09	13:25	20
27119	HLSF-0143-TB-228	Normal	water	2004-02-09	13:25	2

Sample	Test	Method	Prep	Priority	Due Date
27118	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Ag, Total	S 6010B	S 3010A	Normal	2004-02-10
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Al, Total	S 6010B	S 3010A	Normal	2004-02-10
	Alkalinity	SM 2320B	N/A	Normal	2004-02-10
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-02-10
	As, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	As, Total	S 6010B	S 3010A	Normal	2004-02-10
	B, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	B, Total	S 6010B	S 3010A	Normal	2004-02-10
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Ba, Total	S 6010B	S 3010A	Normal	2004-02-10
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Be, Total	S 6010B	S 3010A	Normal	2004-02-10
	Bromide (IC)	E 300.0	N/A	Normal	2004-02-10
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Cd, Total	S 6010B	S 3010A	Normal	2004-02-10
	Chloride (IC)	E 300.0	N/A	Normal	2004-02-10
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-02-10
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Co, Total	S 6010B	S 3010A	Normal	2004-02-10
	Conductivity	SM 2510B	N/A	Normal	2004-02-10
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Cr, Total	S 6010B	S 3010A	Normal	2004-02-10
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Cu, Total	S 6010B	S 3010A	Normal	2004-02-10
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-02-10
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Fe, Total	S 6010B	S 3010A	Normal	2004-02-10
	Fluoride (IC)	E 300.0	N/A	Normal	2004-02-10
	Hg, Total	S 7470A	N/A	Normal	2004-02-10
	K, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Mn, Total	S 6010B	S 3010A	Normal	2004-02-10
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Mo, Total	S 6010B	S 3010A	Normal	2004-02-10

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-02-10
	NO3 (IC)	E 300.0	N/A	Normal	2004-02-10
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Ni, Total	S 6010B	S 3010A	Normal	2004-02-10
	P, Total	S 6010B	S 3010A	Normal	2004-02-10
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Pb, Total	S 6010B	S 3010A	Normal	2004-02-10
	SO4 (IC)	E 300.0	N/A	Normal	2004-02-10
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Se, Total	S 6010B	S 3010A	Normal	2004-02-10
	Semivolatiles	S 8270C	S 3510C	Normal	2004-02-10
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Si, Total	S 6010B	S 3010A	Normal	2004-02-10
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Sn, Total	S 6010B	S 3010A	Normal	2004-02-10
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Sr, Total	S 6010B	S 3010A	Normal	2004-02-10
	TDS	SM 2540C	N/A	Normal	2004-02-10
	TKN	E 351.3	N/A	Normal	2004-02-10
	TOC	E 415.1	N/A	Normal	2004-02-10
	TPH DRO	Mod. 8015B	N/A	Normal	2004-02-10
	TPH GRO	S 8015B	S 5030B	Normal	2004-02-10
	Total Cyanide	SM 4500-CN C,E	N/A	Normal	2004-02-10
	V, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	V, Total	S 6010B	S 3010A	Normal	2004-02-10
	Volatiles	S 8260B	S 5030B	Normal	2004-02-10
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Zn, Total	S 6010B	S 3010A	Normal	2004-02-10
	pH	SM 4500-H+	N/A	Normal	2004-01-16
27119	Volatiles	S 8260B	S 5030B	Normal	2004-02-10 11:48:38.663736-06

Work Order Receipt

Order

Work Order	4021017
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 FF
	Project Name = HELSTF Chrome
	Project Number = 20 FF
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
27120	HLSF-0148-HMW-113-0204	Normal	water	2004-02-09	13:25	20
27121	HLSF-0143-TB-227	Normal	water	2004-02-09	13:25	2

Sample	Test	Method	Prep	Priority	Due Date
27120	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Ag, Total	S 6010B	S 3010A	Normal	2004-02-10
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Al, Total	S 6010B	S 3010A	Normal	2004-02-10
	Alkalinity	SM 2320B	N/A	Normal	2004-02-10
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-02-10
	As, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	As, Total	S 6010B	S 3010A	Normal	2004-02-10
	B, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	B, Total	S 6010B	S 3010A	Normal	2004-02-10
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Ba, Total	S 6010B	S 3010A	Normal	2004-02-10
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Be, Total	S 6010B	S 3010A	Normal	2004-02-10
	Bromide (IC)	E 300.0	N/A	Normal	2004-02-10
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Cd, Total	S 6010B	S 3010A	Normal	2004-02-10
	Chloride (IC)	E 300.0	N/A	Normal	2004-02-10
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-02-10
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Co, Total	S 6010B	S 3010A	Normal	2004-02-10
	Conductivity	SM 2510B	N/A	Normal	2004-02-10
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Cr, Total	S 6010B	S 3010A	Normal	2004-02-10
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Cu, Total	S 6010B	S 3010A	Normal	2004-02-10
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-02-10
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Fe, Total	S 6010B	S 3010A	Normal	2004-02-10
	Fluoride (IC)	E 300.0	N/A	Normal	2004-02-10
	Hg, Total	S 7470A	N/A	Normal	2004-02-10
	K, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Mn, Total	S 6010B	S 3010A	Normal	2004-02-10
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Mo, Total	S 6010B	S 3010A	Normal	2004-02-10

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-02-10
	NO3 (IC)	E 300.0	N/A	Normal	2004-02-10
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Ni, Total	S 6010B	S 3010A	Normal	2004-02-10
	P, Total	S 6010B	S 3010A	Normal	2004-02-10
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Pb, Total	S 6010B	S 3010A	Normal	2004-02-10
	SO4 (IC)	E 300.0	N/A	Normal	2004-02-10
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Se, Total	S 6010B	S 3010A	Normal	2004-02-10
	Semivolatiles	S 8270C	S 3510C	Normal	2004-02-10
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Si, Total	S 6010B	S 3010A	Normal	2004-02-10
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Sn, Total	S 6010B	S 3010A	Normal	2004-02-10
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Sr, Total	S 6010B	S 3010A	Normal	2004-02-10
	TDS	SM 2540C	N/A	Normal	2004-02-10
	TKN	E 351.3	N/A	Normal	2004-02-10
	TOC	E 415.1	N/A	Normal	2004-02-10
	TPH DRO	Mod. 8015B	N/A	Normal	2004-02-10
	TPH GRO	S 8015B	S 5030B	Normal	2004-02-10
	V, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	V, Total	S 6010B	S 3010A	Normal	2004-02-10
	Volatiles	S 8260B	S 5030B	Normal	2004-02-10
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-02-10
	Zn, Total	S 6010B	S 3010A	Normal	2004-02-10
	pH	SM 4500-H+	N/A	Normal	2004-02-10
27121	Volatiles	S 8260B	S 5030B	Normal	2004-02-10 11:57:03.28987-06

Work Order Receipt

Order

Work Order	4021829
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 FF
	Project Name = HELSTF Chrome
	Project Number = 20 FF
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
27614	HLSF-0143-HMW-037-0204	Normal	water	2004-02-17	15:07	20
27615	HLSF-0143-TB-228	Normal	water	2004-02-17	15:07	2

Sample	Test	Method	Prep	Priority	Due Date
27614	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Ag, Total	S 6010B	S 3010A	Normal	2004-01-24
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Al, Total	S 6010B	S 3010A	Normal	2004-01-24
	Alkalinity	SM 2320B	N/A	Normal	2004-01-24
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-01-24
	As, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	As, Total	S 6010B	S 3010A	Normal	2004-01-24
	B, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	B, Total	S 6010B	S 3010A	Normal	2004-01-24
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Ba, Total	S 6010B	S 3010A	Normal	2004-01-24
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Be, Total	S 6010B	S 3010A	Normal	2004-01-24
	Bromide (IC)	E 300.0	N/A	Normal	2004-01-24
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Cd, Total	S 6010B	S 3010A	Normal	2004-01-24
	Chloride (IC)	E 300.0	N/A	Normal	2004-01-24
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-01-24
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Co, Total	S 6010B	S 3010A	Normal	2004-01-24
	Conductivity	SM 2510B	N/A	Normal	2004-01-24
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Cr, Total	S 6010B	S 3010A	Normal	2004-01-24
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Cu, Total	S 6010B	S 3010A	Normal	2004-01-24
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-01-24
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Fe, Total	S 6010B	S 3010A	Normal	2004-01-24
	Fluoride (IC)	E 300.0	N/A	Normal	2004-01-24
	Hg, Total	S 7470A	N/A	Normal	2004-01-24
	K, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Mn, Total	S 6010B	S 3010A	Normal	2004-01-24
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Mo, Total	S 6010B	S 3010A	Normal	2004-01-24

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-01-24
	NO3 (IC)	E 300.0	N/A	Normal	2004-01-24
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Ni, Total	S 6010B	S 3010A	Normal	2004-01-24
	P, Total	S 6010B	S 3010A	Normal	2004-01-24
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Pb, Total	S 6010B	S 3010A	Normal	2004-01-24
	SO4 (IC)	E 300.0	N/A	Normal	2004-01-24
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Se, Total	S 6010B	S 3010A	Normal	2004-01-24
	Semivolatiles	S 8270C	S 3510C	Normal	2004-01-24
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Si, Total	S 6010B	S 3010A	Normal	2004-01-24
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Sn, Total	S 6010B	S 3010A	Normal	2004-01-24
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Sr, Total	S 6010B	S 3010A	Normal	2004-01-24
	TDS	SM 2540C	N/A	Normal	2004-01-24
	TKN	E 351.3	N/A	Normal	2004-01-24
	TOC	E 415.1	N/A	Normal	2004-01-24
	TPH DRO	Mod. 8015B	N/A	Normal	2004-01-24
	TPH GRO	S 8015B	S 5030B	Normal	2004-01-24
	V, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	V, Total	S 6010B	S 3010A	Normal	2004-01-24
	Volatiles	S 8260B	S 5030B	Normal	2004-01-24
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Zn, Total	S 6010B	S 3010A	Normal	2004-01-24
	pH	SM 4500-H+	N/A	Normal	2004-01-24
27615	Volatiles	S 8260B	S 5030B	Normal	2004-02-18 12:44:09.456811-06

Work Order Receipt

Order

Work Order	4021830
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 FF
	Project Name = HELSTF Chrome
	Project Number = 20 FF
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
27616	HLSF-0173-HMW-038-0204	Normal	water	2004-02-17	14:58	20
27617	HLSF-0143-TB-230	Normal	water	2004-02-17	14:58	2

Sample	Test	Method	Prep	Priority	Due Date
27616	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Ag, Total	S 6010B	S 3010A	Normal	2004-01-24
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Al, Total	S 6010B	S 3010A	Normal	2004-01-24
	Alkalinity	SM 2320B	N/A	Normal	2004-01-24
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-01-24
	As, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	As, Total	S 6010B	S 3010A	Normal	2004-01-24
	B, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	B, Total	S 6010B	S 3010A	Normal	2004-01-24
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Ba, Total	S 6010B	S 3010A	Normal	2004-01-24
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Be, Total	S 6010B	S 3010A	Normal	2004-01-24
	Bromide (IC)	E 300.0	N/A	Normal	2004-01-24
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Cd, Total	S 6010B	S 3010A	Normal	2004-01-24
	Chloride (IC)	E 300.0	N/A	Normal	2004-01-24
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-01-24
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Co, Total	S 6010B	S 3010A	Normal	2004-01-24
	Conductivity	SM 2510B	N/A	Normal	2004-01-24
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Cr, Total	S 6010B	S 3010A	Normal	2004-01-24
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Cu, Total	S 6010B	S 3010A	Normal	2004-01-24
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-01-24
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Fe, Total	S 6010B	S 3010A	Normal	2004-01-24
	Fluoride (IC)	E 300.0	N/A	Normal	2004-01-24
	Hg, Total	S 7470A	N/A	Normal	2004-01-24
	K, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Mn, Total	S 6010B	S 3010A	Normal	2004-01-24
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Mo, Total	S 6010B	S 3010A	Normal	2004-01-24

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-01-24
	NO3 (IC)	E 300.0	N/A	Normal	2004-01-24
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Ni, Total	S 6010B	S 3010A	Normal	2004-01-24
	P, Total	S 6010B	S 3010A	Normal	2004-01-24
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Pb, Total	S 6010B	S 3010A	Normal	2004-01-24
	SO4 (IC)	E 300.0	N/A	Normal	2004-01-24
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Se, Total	S 6010B	S 3010A	Normal	2004-01-24
	Semivolatiles	S 8270C	S 3510C	Normal	2004-01-24
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Si, Total	S 6010B	S 3010A	Normal	2004-01-24
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Sn, Total	S 6010B	S 3010A	Normal	2004-01-24
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Sr, Total	S 6010B	S 3010A	Normal	2004-01-24
	TDS	SM 2540C	N/A	Normal	2004-01-24
	TKN	E 351.3	N/A	Normal	2004-01-24
	TOC	E 415.1	N/A	Normal	2004-01-24
	TPH DRO	Mod. 8015B	N/A	Normal	2004-01-24
	TPH GRO	S 8015B	S 5030B	Normal	2004-01-24
	V, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	V, Total	S 6010B	S 3010A	Normal	2004-01-24
	Volatiles	S 8260B	S 5030B	Normal	2004-01-24
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-01-24
	Zn, Total	S 6010B	S 3010A	Normal	2004-01-24
	pH	SM 4500-H+	N/A	Normal	2004-01-24
27617	Volatiles	S 8260B	S 5030B	Normal	2004-02-18 12:46:31.299942-06

Work Order Receipt

Order

Work Order	4021928
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 FF
	Project Name = HELSTF Chrome
	Project Number = 20 FF
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
27721	HLSF-0143-HMW-011-0204	Normal	water	2004-02-18	13:22	20
27722	HLSF-0143-TB-225	Normal	water	2004-02-18	13:22	2

Sample	Test	Method	Prep	Priority	Due Date
27721	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ag, Total	S 6010B	S 3010A	Normal	2004-01-25
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Al, Total	S 6010B	S 3010A	Normal	2004-01-25
	Alkalinity	SM 2320B	N/A	Normal	2004-01-25
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-01-25
	As, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	As, Total	S 6010B	S 3010A	Normal	2004-01-25
	B, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	B, Total	S 6010B	S 3010A	Normal	2004-01-25
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ba, Total	S 6010B	S 3010A	Normal	2004-01-25
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Be, Total	S 6010B	S 3010A	Normal	2004-01-25
	Bromide (IC)	E 300.0	N/A	Normal	2004-01-25
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cd, Total	S 6010B	S 3010A	Normal	2004-01-25
	Chloride (IC)	E 300.0	N/A	Normal	2004-01-25
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-01-25
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Co, Total	S 6010B	S 3010A	Normal	2004-01-25
	Conductivity	SM 2510B	N/A	Normal	2004-01-25
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cr, Total	S 6010B	S 3010A	Normal	2004-01-25
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cu, Total	S 6010B	S 3010A	Normal	2004-01-25
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-01-25
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Fe, Total	S 6010B	S 3010A	Normal	2004-01-25
	Fluoride (IC)	E 300.0	N/A	Normal	2004-01-25
	Hg, Total	S 7470A	N/A	Normal	2004-01-25
	K, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mn, Total	S 6010B	S 3010A	Normal	2004-01-25
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mo, Total	S 6010B	S 3010A	Normal	2004-01-25

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-01-25
	NO3 (IC)	E 300.0	N/A	Normal	2004-01-25
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ni, Total	S 6010B	S 3010A	Normal	2004-01-25
	P, Total	S 6010B	S 3010A	Normal	2004-01-25
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Pb, Total	S 6010B	S 3010A	Normal	2004-01-25
	SO4 (IC)	E 300.0	N/A	Normal	2004-01-25
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Se, Total	S 6010B	S 3010A	Normal	2004-01-25
	Semivolatiles	S 8270C	S 3510C	Normal	2004-01-25
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Si, Total	S 6010B	S 3010A	Normal	2004-01-25
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Sn, Total	S 6010B	S 3010A	Normal	2004-01-25
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Sr, Total	S 6010B	S 3010A	Normal	2004-01-25
	TDS	SM 2540C	N/A	Normal	2004-01-25
	TKN	E 351.3	N/A	Normal	2004-01-25
	TOC	E 415.1	N/A	Normal	2004-01-25
	TPH DRO	Mod. 8015B	N/A	Normal	2004-01-25
	TPH GRO	S 8015B	S 5030B	Normal	2004-01-25
	Total Cyanide	SM 4500-CN C,E	N/A	Normal	2004-01-25
	V, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	V, Total	S 6010B	S 3010A	Normal	2004-01-25
	Volatiles	S 8260B	S 5030B	Normal	2004-01-25
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Zn, Total	S 6010B	S 3010A	Normal	2004-01-25
	pH	SM 4500-H+	N/A	Normal	2004-01-25
27722	Volatiles	S 8260B	S 5030B	Normal	2004-01-25

Work Order Receipt

Order

Work Order	4021929
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 FF
	Project Name = HELSTF Chrome
	Project Number = 20 FF
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
27723	HLSF-0143-HMW-036-0204	Normal	water	2004-02-18	14:15	20
27724	HLSF-0143-TB-0228	Normal	water	2004-02-18	14:15	2

Sample	Test	Method	Prep	Priority	Due Date
27723	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ag, Total	S 6010B	S 3010A	Normal	2004-01-25
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Al, Total	S 6010B	S 3010A	Normal	2004-01-25
	Alkalinity	SM 2320B	N/A	Normal	2004-01-25
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-01-25
	As, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	As, Total	S 6010B	S 3010A	Normal	2004-01-25
	B, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	B, Total	S 6010B	S 3010A	Normal	2004-01-25
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ba, Total	S 6010B	S 3010A	Normal	2004-01-25
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Be, Total	S 6010B	S 3010A	Normal	2004-01-25
	Bromide (IC)	E 300.0	N/A	Normal	2004-01-25
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cd, Total	S 6010B	S 3010A	Normal	2004-01-25
	Chloride (IC)	E 300.0	N/A	Normal	2004-01-25
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-01-25
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Co, Total	S 6010B	S 3010A	Normal	2004-01-25
	Conductivity	SM 2510B	N/A	Normal	2004-01-25
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cr, Total	S 6010B	S 3010A	Normal	2004-01-25
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cu, Total	S 6010B	S 3010A	Normal	2004-01-25
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-01-25
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Fe, Total	S 6010B	S 3010A	Normal	2004-01-25
	Fluoride (IC)	E 300.0	N/A	Normal	2004-01-25
	Hg, Total	S 7470A	N/A	Normal	2004-01-25
	K, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mn, Total	S 6010B	S 3010A	Normal	2004-01-25
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mo, Total	S 6010B	S 3010A	Normal	2004-01-25

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-01-25
	NO3 (IC)	E 300.0	N/A	Normal	2004-01-25
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ni, Total	S 6010B	S 3010A	Normal	2004-01-25
	P, Total	S 6010B	S 3010A	Normal	2004-01-25
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Pb, Total	S 6010B	S 3010A	Normal	2004-01-25
	SO4 (IC)	E 300.0	N/A	Normal	2004-01-25
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Se, Total	S 6010B	S 3010A	Normal	2004-01-25
	Semivolatiles	S 8270C	S 3510C	Normal	2004-01-25
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Si, Total	S 6010B	S 3010A	Normal	2004-01-25
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Sn, Total	S 6010B	S 3010A	Normal	2004-01-25
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Sr, Total	S 6010B	S 3010A	Normal	2004-01-25
	TDS	SM 2540C	N/A	Normal	2004-01-25
	TKN	E 351.3	N/A	Normal	2004-01-25
	TOC	E 415.1	N/A	Normal	2004-01-25
	TPH DRO	Mod. 8015B	N/A	Normal	2004-01-25
	TPH GRO	S 8015B	S 5030B	Normal	2004-01-25
	Total Cyanide	SM 4500-CN C,E	N/A	Normal	2004-01-25
	V, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	V, Total	S 6010B	S 3010A	Normal	2004-01-25
	Volatiles	S 8260B	S 5030B	Normal	2004-01-25
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Zn, Total	S 6010B	S 3010A	Normal	2004-01-25
	pH	SM 4500-H+	N/A	Normal	2004-01-25
27724	Volatiles	S 8260B	S 5030B	Normal	2004-01-25

Work Order Receipt

Order

Work Order	4021930
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 FF
	Project Name = HELSTF Chrome
	Project Number = 20 FF
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
27725	HLSF-0143-HMW-043-0204	Normal	water	2004-02-18	14:45	20
27726	HLSF-01-0143-TB-235	Normal	water	2004-02-18	14:45	2

Sample	Test	Method	Prep	Priority	Due Date
27725	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ag, Total	S 6010B	S 3010A	Normal	2004-01-25
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Al, Total	S 6010B	S 3010A	Normal	2004-01-25
	Alkalinity	SM 2320B	N/A	Normal	2004-01-25
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-01-25
	As, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	As, Total	S 6010B	S 3010A	Normal	2004-01-25
	B, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	B, Total	S 6010B	S 3010A	Normal	2004-01-25
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ba, Total	S 6010B	S 3010A	Normal	2004-01-25
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Be, Total	S 6010B	S 3010A	Normal	2004-01-25
	Bromide (IC)	E 300.0	N/A	Normal	2004-01-25
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cd, Total	S 6010B	S 3010A	Normal	2004-01-25
	Chloride (IC)	E 300.0	N/A	Normal	2004-01-25
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-01-25
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Co, Total	S 6010B	S 3010A	Normal	2004-01-25
	Conductivity	SM 2510B	N/A	Normal	2004-01-25
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cr, Total	S 6010B	S 3010A	Normal	2004-01-25
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Cu, Total	S 6010B	S 3010A	Normal	2004-01-25
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-01-25
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Fe, Total	S 6010B	S 3010A	Normal	2004-01-25
	Fluoride (IC)	E 300.0	N/A	Normal	2004-01-25
	Hg, Total	S 7470A	N/A	Normal	2004-01-25
	K, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mn, Total	S 6010B	S 3010A	Normal	2004-01-25
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Mo, Total	S 6010B	S 3010A	Normal	2004-01-25

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-01-25
	NO3 (IC)	E 300.0	N/A	Normal	2004-01-25
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Ni, Total	S 6010B	S 3010A	Normal	2004-01-25
	P, Total	S 6010B	S 3010A	Normal	2004-01-25
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Pb, Total	S 6010B	S 3010A	Normal	2004-01-25
	SO4 (IC)	E 300.0	N/A	Normal	2004-01-25
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Se, Total	S 6010B	S 3010A	Normal	2004-01-25
	Semivolatiles	S 8270C	S 3510C	Normal	2004-01-25
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Si, Total	S 6010B	S 3010A	Normal	2004-01-25
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Sn, Total	S 6010B	S 3010A	Normal	2004-01-25
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Sr, Total	S 6010B	S 3010A	Normal	2004-01-25
	TDS	SM 2540C	N/A	Normal	2004-01-25
	TKN	E 351.3	N/A	Normal	2004-01-25
	TOC	E 415.1	N/A	Normal	2004-01-25
	TPH DRO	Mod. 8015B	N/A	Normal	2004-01-25
	TPH GRO	S 8015B	S 5030B	Normal	2004-01-25
	Total Cyanide	SM 4500-CN C,E	N/A	Normal	2004-01-25
	V, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	V, Total	S 6010B	S 3010A	Normal	2004-01-25
	Volatiles	S 8260B	S 5030B	Normal	2004-01-25
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-01-25
	Zn, Total	S 6010B	S 3010A	Normal	2004-01-25
	pH	SM 4500-H+	N/A	Normal	2004-01-25
27726	Volatiles	S 8260B	S 5030B	Normal	2004-01-25

Work Order Receipt

Order

Work Order	4022313
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 FF
	Project Name = HELSTF Chrome
	Project Number = 20 FF
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
27957	HLSF-0143-HMW-139-0204	Normal	water	2004-02-20	12:00	20
27958	HLSF-0143-TB-232	Normal	water	2004-02-20	12:00	2

Sample	Test	Method	Prep	Priority	Due Date
27957	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.083452-06
	Ag, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.097245-06
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.100396-06
	Al, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.103801-06
	Alkalinity	SM 2320B	N/A	Normal	2004-02-23 13:27:21.106662-06
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-02-23 13:27:21.203934-06
	As, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.152785-06
	As, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.156203-06
	B, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.160218-06
	B, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.163339-06
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.17035-06
	Ba, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.173148-06
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.176014-06
	Be, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.185296-06
	Bromide (IC)	E 300.0	N/A	Normal	2004-02-23 13:27:21.207359-06
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.210713-06
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.214094-06
	Cd, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.241938-06
	Chloride (IC)	E 300.0	N/A	Normal	2004-02-23 13:27:21.251051-06
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-02-23 13:27:21.143412-06
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.257172-06
	Co, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.263426-06
	Conductivity	SM 2510B	N/A	Normal	2004-02-23 13:27:21.269238-06
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.112875-06
	Cr, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.115932-06
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.118983-06
	Cu, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.125267-06
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-02-23 13:27:21.128062-06
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.134229-06
	Fe, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.137286-06
	Fluoride (IC)	E 300.0	N/A	Normal	2004-02-23 13:27:21.182193-06
	Hg, Total	S 7470A	N/A	Normal	2004-02-23 13:27:21.19456-06
	K, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.217161-06
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.226638-06
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.229881-06
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.27232-06
	Mn, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.275375-06
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.281259-06
	Mo, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.287596-06

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-02-23 13:27:21.305606-06
	NO3 (IC)	E 300.0	N/A	Normal	2004-02-23 13:27:21.140049-06
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.296502-06
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.299558-06
	Ni, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.302576-06
	P, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.146662-06
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.149737-06
	Pb, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.197723-06
	SO4 (IC)	E 300.0	N/A	Normal	2004-02-23 13:27:21.260215-06
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.232712-06
	Se, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.235821-06
	Semivolatiles	S 8270C	S 3510C	Normal	2004-02-23 13:27:21.238873-06
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.191164-06
	Si, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.244993-06
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.248029-06
	Sn, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.254371-06
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.293712-06
	Sr, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.290573-06
	TDS	SM 2540C	N/A	Normal	2004-02-23 13:27:21.109709-06
	TKN	E 351.3	N/A	Normal	2004-02-23 13:27:21.122061-06
	TOC	E 415.1	N/A	Normal	2004-02-23 13:27:21.131099-06
	TPH DRO	Mod. 8015B	N/A	Normal	2004-02-23 13:27:21.179053-06
	TPH GRO	S 8015B	S 5030B	Normal	2004-02-23 13:27:21.18805-06
	Total Cyanide	SM 4500-CN C,E	N/A	Normal	2004-02-23 13:27:21.167209-06
	V, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.220253-06
	V, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.223519-06
	Volatiles	S 8260B	S 5030B	Normal	2004-02-23 13:27:21.266236-06
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:27:21.278142-06
	Zn, Total	S 6010B	S 3010A	Normal	2004-02-23 13:27:21.284476-06
	pH	SM 4500-H+	N/A	Normal	2004-02-23 13:27:21.200772-06
27958	Volatiles	S 8260B	S 5030B	Normal	2004-02-23 13:27:45.787083-06

Work Order Receipt

Order

Work Order	4022314
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	10-FF
	Project Name = HELSF Chrome Site
	Project Number = 10-FF
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
27959	HLSF-0143-HMW-040-0204	Normal	water	2004-02-20	13:00	20
27960	HLSF-0143-TB-233	Normal	water	2004-02-20	13:00	2

Sample	Test	Method	Prep	Priority	Due Date
27959	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:58.951075-06
	Ag, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:58.965525-06
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:58.968819-06
	Al, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:58.972056-06
	Alkalinity	SM 2320B	N/A	Normal	2004-02-23 13:34:58.975015-06
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-02-23 13:34:59.075835-06
	As, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.024318-06
	As, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.027572-06
	B, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.030985-06
	B, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.034183-06
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.040873-06
	Ba, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.043796-06
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.047057-06
	Be, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.056795-06
	Bromide (IC)	E 300.0	N/A	Normal	2004-02-23 13:34:59.079187-06
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.082441-06
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.085925-06
	Cd, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.115433-06
	Chloride (IC)	E 300.0	N/A	Normal	2004-02-23 13:34:59.12479-06
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-02-23 13:34:59.014561-06
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.130995-06
	Co, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.137423-06
	Conductivity	SM 2510B	N/A	Normal	2004-02-23 13:34:59.143483-06
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:58.981739-06
	Cr, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:58.984953-06
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:58.988152-06
	Cu, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:58.994603-06
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-02-23 13:34:58.997545-06
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.003986-06
	Fe, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.007225-06
	Fluoride (IC)	E 300.0	N/A	Normal	2004-02-23 13:34:59.053556-06
	Hg, Total	S 7470A	N/A	Normal	2004-02-23 13:34:59.066149-06
	K, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.090034-06
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.099751-06
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.102956-06
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.146745-06
	Mn, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.150181-06
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.156299-06
	Mo, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.162652-06

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-02-23 13:34:59.181234-06
	NO3 (IC)	E 300.0	N/A	Normal	2004-02-23 13:34:59.010132-06
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.171621-06
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.174803-06
	Ni, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.177984-06
	P, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.017945-06
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.021134-06
	Pb, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.069373-06
	SO4 (IC)	E 300.0	N/A	Normal	2004-02-23 13:34:59.134168-06
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.105891-06
	Se, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.109049-06
	Semivolatiles	S 8270C	S 3510C	Normal	2004-02-23 13:34:59.112224-06
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.062953-06
	Si, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.118634-06
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.121888-06
	Sn, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.128056-06
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.16874-06
	Sr, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.165566-06
	TDS	SM 2540C	N/A	Normal	2004-02-23 13:34:58.978416-06
	TKN	E 351.3	N/A	Normal	2004-02-23 13:34:58.991346-06
	TOC	E 415.1	N/A	Normal	2004-02-23 13:34:59.000724-06
	TPH DRO	Mod. 8015B	N/A	Normal	2004-02-23 13:34:59.050256-06
	TPH GRO	S 8015B	S 5030B	Normal	2004-02-23 13:34:59.059696-06
	Total Cyanide	SM 4500-CN C,E	N/A	Normal	2004-02-23 13:34:59.037401-06
	V, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.093319-06
	V, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.096545-06
	Volatiles	S 8260B	S 5030B	Normal	2004-02-23 13:34:59.140318-06
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:34:59.153119-06
	Zn, Total	S 6010B	S 3010A	Normal	2004-02-23 13:34:59.159473-06
	pH	SM 4500-H+	N/A	Normal	2004-02-23 13:34:59.072556-06
27960	Volatiles	S 8260B	S 5030B	Normal	2004-02-23 13:35:20.325465-06

Work Order Receipt

Order

Work Order	4022315
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 FF
	Project Name = HELSTF Chrome
	Project Number = 20 FF
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
27961	HLSF-0143-HMW-041-0204	Normal	water	2004-02-20	12:49	20
27962	HLSF-0143-TB-234	Normal	water	2004-02-20	12:49	2

Sample	Test	Method	Prep	Priority	Due Date
27961	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Ag, Total	S 6010B	S 3010A	Normal	2004-02-23
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Al, Total	S 6010B	S 3010A	Normal	2004-02-23
	Alkalinity	SM 2320B	N/A	Normal	2004-02-23
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-02-23
	As, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	As, Total	S 6010B	S 3010A	Normal	2004-02-23
	B, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	B, Total	S 6010B	S 3010A	Normal	2004-02-23
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Ba, Total	S 6010B	S 3010A	Normal	2004-02-23
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Be, Total	S 6010B	S 3010A	Normal	2004-02-23
	Bromide (IC)	E 300.0	N/A	Normal	2004-02-23
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Cd, Total	S 6010B	S 3010A	Normal	2004-02-23
	Chloride (IC)	E 300.0	N/A	Normal	2004-02-23
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-02-23
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Co, Total	S 6010B	S 3010A	Normal	2004-02-23
	Conductivity	SM 2510B	N/A	Normal	2004-02-23
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Cr, Total	S 6010B	S 3010A	Normal	2004-02-23
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Cu, Total	S 6010B	S 3010A	Normal	2004-02-23
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-02-23
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Fe, Total	S 6010B	S 3010A	Normal	2004-02-23
	Fluoride (IC)	E 300.0	N/A	Normal	2004-02-23
	Hg, Total	S 7470A	N/A	Normal	2004-02-23
	K, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Mn, Total	S 6010B	S 3010A	Normal	2004-02-23
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Mo, Total	S 6010B	S 3010A	Normal	2004-02-23

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-02-23
	NO3 (IC)	E 300.0	N/A	Normal	2004-02-23
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Ni, Total	S 6010B	S 3010A	Normal	2004-02-23
	P, Total	S 6010B	S 3010A	Normal	2004-02-23
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Pb, Total	S 6010B	S 3010A	Normal	2004-02-23
	SO4 (IC)	E 300.0	N/A	Normal	2004-02-23
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Se, Total	S 6010B	S 3010A	Normal	2004-02-23
	Semivolatiles	S 8270C	S 3510C	Normal	2004-02-23
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Si, Total	S 6010B	S 3010A	Normal	2004-02-23
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Sn, Total	S 6010B	S 3010A	Normal	2004-02-23
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Sr, Total	S 6010B	S 3010A	Normal	2004-02-23
	TDS	SM 2540C	N/A	Normal	2004-02-23
	TKN	E 351.3	N/A	Normal	2004-02-23
	TOC	E 415.1	N/A	Normal	2004-02-23
	TPH DRO	Mod. 8015B	N/A	Normal	2004-02-23
	TPH GRO	S 8015B	S 5030B	Normal	2004-02-23
	Total Cyanide	SM 4500-CN C,E	N/A	Normal	2004-02-23
	V, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	V, Total	S 6010B	S 3010A	Normal	2004-02-23
	Volatiles	S 8260B	S 5030B	Normal	2004-02-23
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23
	Zn, Total	S 6010B	S 3010A	Normal	2004-02-23
	pH	SM 4500-H+	N/A	Normal	2004-02-23
27962	Volatiles	S 8260B	S 5030B	Normal	2004-02-23 13:41:52.072864-06

Work Order Receipt

Order

Work Order	4022316
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 FF
	Project Name = HELSTF Chrome
	Project Number = 20 FF
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
27963	HLSF-0149-HMW-039-0204	Normal	water	2004-02-20	12:00	40
27964	HLSF-0143-TB-231	Normal	water	2004-02-20	12:00	4

Sample	Test	Method	Prep	Priority	Due Date
27963	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.57844-06
	Ag, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.592166-06
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.595322-06
	Al, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.598435-06
	Alkalinity	SM 2320B	N/A	Normal	2004-02-23 13:45:36.601239-06
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-02-23 13:45:36.696331-06
	As, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.647655-06
	As, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.650667-06
	B, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.653695-06
	B, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.656757-06
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.662627-06
	Ba, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.665408-06
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.668432-06
	Be, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.674845-06
	Bromide (IC)	E 300.0	N/A	Normal	2004-02-23 13:45:36.69953-06
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.702625-06
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.705943-06
	Cd, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.757831-06
	Chloride (IC)	E 300.0	N/A	Normal	2004-02-23 13:45:36.764411-06
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-02-23 13:45:36.638307-06
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.805201-06
	Co, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.827691-06
	Conductivity	SM 2510B	N/A	Normal	2004-02-23 13:45:36.834459-06
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.607444-06
	Cr, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.61057-06
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.613677-06
	Cu, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.620101-06
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-02-23 13:45:36.622925-06
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.629118-06
	Fe, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.631923-06
	Fluoride (IC)	E 300.0	N/A	Normal	2004-02-23 13:45:36.677746-06
	Hg, Total	S 7470A	N/A	Normal	2004-02-23 13:45:36.687074-06
	K, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.709006-06
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.71817-06
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.72138-06
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.831186-06
	Mn, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.909964-06
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.913236-06
	Mo, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.940554-06

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-02-23 13:45:36.994498-06
	NO3 (IC)	E 300.0	N/A	Normal	2004-02-23 13:45:36.634956-06
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.980913-06
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.98784-06
	Ni, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.99101-06
	P, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.641492-06
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.644602-06
	Pb, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.690169-06
	SO4 (IC)	E 300.0	N/A	Normal	2004-02-23 13:45:36.808263-06
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.72418-06
	Se, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.741089-06
	Semivolatiles	S 8270C	S 3510C	Normal	2004-02-23 13:45:36.752094-06
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.684013-06
	Si, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.761185-06
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.798835-06
	Sn, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.802297-06
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.984776-06
	Sr, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.977515-06
	TDS	SM 2540C	N/A	Normal	2004-02-23 13:45:36.604282-06
	TKN	E 351.3	N/A	Normal	2004-02-23 13:45:36.616734-06
	TOC	E 415.1	N/A	Normal	2004-02-23 13:45:36.625976-06
	TPH DRO	Mod. 8015B	N/A	Normal	2004-02-23 13:45:36.671453-06
	TPH GRO	S 8015B	S 5030B	Normal	2004-02-23 13:45:36.680854-06
	Total Cyanide	SM 4500-CN C,E	N/A	Normal	2004-02-23 13:45:36.659554-06
	V, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.712108-06
	V, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.715043-06
	Volatiles	S 8260B	S 5030B	Normal	2004-02-23 13:45:36.81145-06
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-02-23 13:45:36.922311-06
	Zn, Total	S 6010B	S 3010A	Normal	2004-02-23 13:45:36.974257-06
	pH	SM 4500-H+	N/A	Normal	2004-02-23 13:45:36.693227-06
27964	Volatiles	S 8260B	S 5030B	Normal	2004-02-23 13:45:55.212223-06

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7801	Date Analyzed:	2004-02-13	Analyzed By:	MK
Prep Batch:	6970	Date Prepared:	2004-02-13	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		144	mg/L as CaCo3	1	4.00
Total Alkalinity		144	mg/L as CaCo3	1	4.00

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7801	Date Analyzed:	2004-02-13	Analyzed By:	MK
Prep Batch:	6970	Date Prepared:	2004-02-13	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		142	mg/L as CaCo3	1	4.00
Total Alkalinity		142	mg/L as CaCo3	1	4.00

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7809	Date Analyzed:	2004-02-20	Analyzed By:	MK
Prep Batch:	6984	Date Prepared:	2004-02-20	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		146	mg/L as CaCo3	1	4.00
Total Alkalinity		146	mg/L as CaCo3	1	4.00

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7809	Date Analyzed:	2004-02-20	Analyzed By:	MK
Prep Batch:	6984	Date Prepared:	2004-02-20	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00

continued . . .

sample 27616 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bicarbonate Alkalinity		160	mg/L as CaCo3	1	4.00
Total Alkalinity		160	mg/L as CaCo3	1	4.00

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7809	Date Analyzed:	2004-02-20	Analyzed By:	MK
Prep Batch:	6984	Date Prepared:	2004-02-20	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		172	mg/L as CaCo3	1	4.00
Total Alkalinity		172	mg/L as CaCo3	1	4.00

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7809	Date Analyzed:	2004-02-20	Analyzed By:	MK
Prep Batch:	6984	Date Prepared:	2004-02-20	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		552	mg/L as CaCo3	1	4.00
Total Alkalinity		552	mg/L as CaCo3	1	4.00

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7809	Date Analyzed:	2004-02-20	Analyzed By:	MK
Prep Batch:	6984	Date Prepared:	2004-02-20	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		142	mg/L as CaCo3	1	4.00
Total Alkalinity		142	mg/L as CaCo3	1	4.00

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A

QC Batch:	7929	Date Analyzed:	2004-03-01	Analyzed By:	MK
Prep Batch:	7083	Date Prepared:	2004-03-01	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		178	mg/L as CaCo3	1	4.00
Total Alkalinity		178	mg/L as CaCo3	1	4.00

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7929	Date Analyzed:	2004-03-01	Analyzed By:	MK
Prep Batch:	7083	Date Prepared:	2004-03-01	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		130	mg/L as CaCo3	1	4.00
Total Alkalinity		130	mg/L as CaCo3	1	4.00

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7929	Date Analyzed:	2004-03-01	Analyzed By:	MK
Prep Batch:	7083	Date Prepared:	2004-03-01	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		234	mg/L as CaCo3	1	4.00
Total Alkalinity		234	mg/L as CaCo3	1	4.00

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7929	Date Analyzed:	2004-03-01	Analyzed By:	MK
Prep Batch:	7083	Date Prepared:	2004-03-01	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		178	mg/L as CaCo3	1	4.00
Total Alkalinity		178	mg/L as CaCo3	1	4.00

Method Blank (1) QC Batch: 7801

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 7809

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 7929

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Duplicate (1) QC Batch: 7801

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Bicarbonate Alkalinity	172	170	mg/L as CaCo3	1	1	11
Total Alkalinity	172	170	mg/L as CaCo3	1	1	11

Duplicate (1) QC Batch: 7809

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Bicarbonate Alkalinity	142	142	mg/L as CaCo3	1	0	11
Total Alkalinity	142	142	mg/L as CaCo3	1	0	11

Duplicate (1) QC Batch: 7929

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Bicarbonate Alkalinity	188	178	mg/L as CaCo3	1	5	11
Total Alkalinity	188	178	mg/L as CaCo3	1	5	11

Standard (ICV-1) QC Batch: 7801

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 105	2004-02-13

Standard (CCV-1) QC Batch: 7801

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 105	2004-02-13

Standard (ICV-1) QC Batch: 7809

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	248	99	90 - 105	2004-02-20

Standard (CCV-1) QC Batch: 7809

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 105	2004-02-20

Standard (ICV-1) QC Batch: 7929

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	238	95	90 - 105	2004-03-01

Standard (CCV-1) QC Batch: 7929

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	236	94	90 - 105	2004-03-01

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7546	Date Analyzed:	2004-02-12	Analyzed By:	MW
Prep Batch:	6755	Date Prepared:	2004-02-12	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7639	Date Analyzed:	2004-02-18	Analyzed By:	MW
Prep Batch:	6835	Date Prepared:	2004-02-18	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7750	Date Analyzed:	2004-02-24	Analyzed By:	MW
Prep Batch:	6929	Date Prepared:	2004-02-24	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7750	Date Analyzed:	2004-02-24	Analyzed By:	MW
Prep Batch:	6929	Date Prepared:	2004-02-24	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7750	Date Analyzed:	2004-02-24	Analyzed By:	MW
Prep Batch:	6929	Date Prepared:	2004-02-24	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7750	Date Analyzed:	2004-02-24	Analyzed By:	MW
Prep Batch:	6929	Date Prepared:	2004-02-24	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7750	Date Analyzed:	2004-02-24	Analyzed By:	MW
Prep Batch:	6929	Date Prepared:	2004-02-24	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7857	Date Analyzed:	2004-02-26	Analyzed By:	MW
Prep Batch:	7021	Date Prepared:	2004-02-26	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7857	Date Analyzed:	2004-02-26	Analyzed By:	MW
Prep Batch:	7021	Date Prepared:	2004-02-26	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7857	Date Analyzed:	2004-02-26	Analyzed By:	MW

Prep Batch: 7021 Date Prepared: 2004-02-26 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis: Ammonia Analytical Method: SM 4500-NH3 B,C Prep Method: N/A
QC Batch: 7857 Date Analyzed: 2004-02-26 Analyzed By: MW
Prep Batch: 7021 Date Prepared: 2004-02-26 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Method Blank (1) QC Batch: 7546

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Method Blank (1) QC Batch: 7639

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Method Blank (1) QC Batch: 7750

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Method Blank (1) QC Batch: 7857

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 7546

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.48	4.65	mg/L	1	5.00	<0.318	90	4	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7639

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.26	4.20	mg/L	1	5.00	<0.318	85	1	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7750

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.82	4.76	mg/L	1	5.00	<0.318	96	1	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7857

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	5.10	4.76	mg/L	1	5.00	<0.318	102	7	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7546

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.93	4.65	mg/L	1	5.00	<0.318	99	6	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7639

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.70	4.98	mg/L	1	5.00	<0.318	94	6	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7750

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.82	4.93	mg/L	1	5.00	<0.318	96	2	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7857

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.59	4.76	mg/L	1	5.00	<0.318	92	4	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7546

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.98	100	85 - 115	2004-02-12

Standard (CCV-1) QC Batch: 7546

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.65	93	85 - 115	2004-02-12

Standard (ICV-1) QC Batch: 7639

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.65	93	85 - 115	2004-02-18

Standard (CCV-1) QC Batch: 7639

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.59	92	85 - 115	2004-02-18

Standard (ICV-1) QC Batch: 7750

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.76	95	85 - 115	2004-02-24

Standard (CCV-1) QC Batch: 7750

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.93	99	85 - 115	2004-02-24

Standard (ICV-1) QC Batch: 7857

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	5.04	101	85 - 115	2004-02-26

Standard (CCV-1) QC Batch: 7857

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.87	97	85 - 115	2004-02-26

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7503	Date Analyzed:	2004-02-10	Analyzed By:	JR
Prep Batch:	6716	Date Prepared:	2004-02-10	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7503	Date Analyzed:	2004-02-10	Analyzed By:	JR
Prep Batch:	6716	Date Prepared:	2004-02-10	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7815	Date Analyzed:	2004-02-18	Analyzed By:	JR
Prep Batch:	6990	Date Prepared:	2004-02-18	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7815	Date Analyzed:	2004-02-18	Analyzed By:	JR
Prep Batch:	6990	Date Prepared:	2004-02-18	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7813	Date Analyzed:	2004-02-19	Analyzed By:	JR
Prep Batch:	6988	Date Prepared:	2004-02-19	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.263	mg/L	1	0.0100

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7813	Date Analyzed:	2004-02-19	Analyzed By:	JR
Prep Batch:	6988	Date Prepared:	2004-02-19	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7813	Date Analyzed:	2004-02-19	Analyzed By:	JR
Prep Batch:	6988	Date Prepared:	2004-02-19	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7816	Date Analyzed:	2004-02-20	Analyzed By:	JR
Prep Batch:	6991	Date Prepared:	2004-02-20	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.306	mg/L	1	0.0100

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7816	Date Analyzed:	2004-02-20	Analyzed By:	JR
Prep Batch:	6991	Date Prepared:	2004-02-20	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0550	mg/L	1	0.0100

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7816	Date Analyzed:	2004-02-20	Analyzed By:	JR

Prep Batch: 6991 Date Prepared: 2004-02-20 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		1.61	mg/L	5	0.0100

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis: Chromium, Hexavalent Analytical Method: SM 3500-Cr B Prep Method: N/A
QC Batch: 7816 Date Analyzed: 2004-02-20 Analyzed By: JR
Prep Batch: 6991 Date Prepared: 2004-02-20 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.313	mg/L	1	0.0100

Method Blank (1) QC Batch: 7503

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 7813

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 7815

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		0.100	mg/L	0.01

Method Blank (1) QC Batch: 7816

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Laboratory Control Spike (LCS-1) QC Batch: 7503

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.516	0.498	mg/L	1	0.500	<0.00500	103	4	88 - 117	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7813

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.497	0.510	mg/L	1	0.500	<0.00500	99	2	88 - 117	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7815

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.500	0.495	mg/L	1	0.500	<0.00500	100	1	88 - 117	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7816

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.490	0.491	mg/L	1	0.500	<0.00500	98	0	88 - 117	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7503

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.559	0.547	mg/L	1.11	0.500	<0.00555	101	2	52 - 161	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7813

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.608	0.609	mg/L	1.11	0.500	0.056	99	0	52 - 161	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7815

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.561	0.565	mg/L	1.11	0.500	<0.00555	101	1	52 - 161	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7816

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.861	0.863	mg/L	1.11	0.500	0.313	99	0	52 - 161	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7503

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.517	103	80 - 120	2004-02-10

Standard (CCV-1) QC Batch: 7503

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.504	101	80 - 120	2004-02-10

Standard (ICV-1) QC Batch: 7813

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.526	105	80 - 120	2004-02-19

Standard (CCV-1) QC Batch: 7813

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.499	100	80 - 120	2004-02-19

Standard (ICV-1) QC Batch: 7815

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.517	103	80 - 120	2004-02-18

Standard (CCV-1) QC Batch: 7815

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.495	99	80 - 120	2004-02-18

Standard (ICV-1) QC Batch: 7816

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.516	103	80 - 120	2004-02-20

Standard (CCV-1) QC Batch: 7816

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.494	99	80 - 120	2004-02-20

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7645	Date Analyzed:	2004-02-10	Analyzed By:	MK
Prep Batch:	6838	Date Prepared:	2004-02-10	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		7470	μMHOS/cm	1	0.00

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7645	Date Analyzed:	2004-02-10	Analyzed By:	MK
Prep Batch:	6838	Date Prepared:	2004-02-10	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		7420	μMHOS/cm	1	0.00

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7850	Date Analyzed:	2004-02-23	Analyzed By:	MK
Prep Batch:	6994	Date Prepared:	2004-02-23	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		6280	μMHOS/cm	1	0.00

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7850	Date Analyzed:	2004-02-23	Analyzed By:	MK
Prep Batch:	6994	Date Prepared:	2004-02-23	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		1380	μMHOS/cm	1	0.00

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7817	Date Analyzed:	2004-02-19	Analyzed By:	MK
Prep Batch:	6992	Date Prepared:	2004-02-19	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		1820	μMHOS/cm	1	0.00

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7817	Date Analyzed:	2004-02-19	Analyzed By:	MK
Prep Batch:	6992	Date Prepared:	2004-02-19	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		1010	μMHOS/cm	1	0.00

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7817	Date Analyzed:	2004-02-19	Analyzed By:	MK
Prep Batch:	6992	Date Prepared:	2004-02-19	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		8310	μMHOS/cm	1	0.00

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7818	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6993	Date Prepared:	2004-02-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		18900	μMHOS/cm	1	0.00

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7818	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6993	Date Prepared:	2004-02-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		34100	μMHOS/cm	1	0.00

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7818	Date Analyzed:	2004-02-20	Analyzed By:	JG

Prep Batch: 6993 Date Prepared: 2004-02-20 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		22500	μMHOS/cm	1	0.00

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7818	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6993	Date Prepared:	2004-02-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		19400	μMHOS/cm	1	0.00

Method Blank (1) QC Batch: 7645

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Method Blank (1) QC Batch: 7817

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Method Blank (1) QC Batch: 7818

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Method Blank (1) QC Batch: 7850

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Duplicate (1) QC Batch: 7645

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	7420	7420	μMHOS/cm	1	0	8

Duplicate (1) QC Batch: 7817

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	8310	8310	μMHOS/cm	1	0	8

Duplicate (1) QC Batch: 7818

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	19500	19400	μMHOS/cm	1	0	8

Duplicate (1) QC Batch: 7850

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	1380	1380	μMHOS/cm	1	0	8

Standard (ICV-1) QC Batch: 7645

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1420	101	90 - 110	2004-02-10

Standard (CCV-1) QC Batch: 7645

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1420	101	90 - 110	2004-02-10

Standard (ICV-1) QC Batch: 7817

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1440	102	90 - 110	2004-02-19

Standard (CCV-1) QC Batch: 7817

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1440	102	90 - 110	2004-02-19

Standard (ICV-1) QC Batch: 7818

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1410	100	90 - 110	2004-02-20

Standard (CCV-1) QC Batch: 7818

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1440	102	90 - 110	2004-02-20

Standard (ICV-1) QC Batch: 7850

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1450	103	90 - 110	2004-02-23

Standard (CCV-1) QC Batch: 7850

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1440	102	90 - 110	2004-02-23

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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 18 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7685	Date Analyzed:	2004-02-20	Analyzed By:	RR
Prep Batch:	6766	Date Prepared:	2004-02-13	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		0.0610	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		2.85	mg/L	10	0.00500
Dissolved Barium		<0.0100	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00500	mg/L	1	0.00500
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.157	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		6.41	mg/L	1	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		24.2	mg/L	1	0.0500

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7685	Date Analyzed:	2004-02-20	Analyzed By:	RR
Prep Batch:	6766	Date Prepared:	2004-02-13	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.35	mg/L	1	0.00500

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7685	Date Analyzed:	2004-02-20	Analyzed By:	RR
Prep Batch:	6766	Date Prepared:	2004-02-13	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500

continued . . .

sample 27120 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		2.85	mg/L	10	0.00500
Dissolved Barium		<0.0100	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00500	mg/L	1	0.00500
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.166	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		6.39	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		23.8	mg/L	10	0.0500

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7685	Date Analyzed:	2004-02-20	Analyzed By:	RR
Prep Batch:	6766	Date Prepared:	2004-02-13	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.33	mg/L	1	0.00500

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7960	Date Analyzed:	2004-03-03	Analyzed By:	RR
Prep Batch:	6887	Date Prepared:	2004-02-20	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		2.69	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125

continued . . .

sample 27614 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.140	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		9.14	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		24.7	mg/L	10	0.0500
Dissolved Lithium		0.545	mg/L	1	0.00500

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7960	Date Analyzed:	2004-03-03	Analyzed By:	RR
Prep Batch:	6887	Date Prepared:	2004-02-20	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		5.32	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.469	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		0.0850	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		5.27	mg/L	1	0.00500
Dissolved Vanadium		0.0350	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		30.6	mg/L	1	0.0500
Dissolved Lithium		0.494	mg/L	1	0.00500

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7960	Date Analyzed:	2004-03-03	Analyzed By:	RR

Prep Batch: 6887 Date Prepared: 2004-02-20 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		4.39	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		0.150	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.331	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		0.123	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		6.94	mg/L	10	0.00500
Dissolved Vanadium		0.0350	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		29.2	mg/L	10	0.0500
Dissolved Lithium		<0.00500	mg/L	1	0.00500

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis: Dissolved Metals Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 7960 Date Analyzed: 2004-03-03 Analyzed By: RR
Prep Batch: 6887 Date Prepared: 2004-02-20 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		5.70	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		0.229	mg/L	1	0.0250
Dissolved Molybdenum		0.207	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		9.21	mg/L	10	0.00500

continued . . .

sample 27723 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		15.2	mg/L	10	0.0500
Dissolved Lithium		0.815	mg/L	1	0.00500

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7960	Date Analyzed:	2004-03-03	Analyzed By:	RR
Prep Batch:	6887	Date Prepared:	2004-02-20	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		4.53	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.234	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		5.01	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		29.2	mg/L	10	0.0500
Dissolved Lithium		0.451	mg/L	1	0.00500

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7995	Date Analyzed:	2004-03-04	Analyzed By:	RR
Prep Batch:	6978	Date Prepared:	2004-02-25	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		3.98	mg/L	10	0.0500

continued . . .

sample 27957 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		0.173	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.0510	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.560	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		0.100	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		5.92	mg/L	10	0.00500
Dissolved Vanadium		0.0260	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		20.1	mg/L	10	0.0500
Dissolved Lithium		0.417	mg/L	1	0.00500

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7995	Date Analyzed:	2004-03-04	Analyzed By:	RR
Prep Batch:	6978	Date Prepared:	2004-02-25	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		1.30	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		3.28	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.702	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.706	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		0.196	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		8.36	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		10.7	mg/L	10	0.0500
Dissolved Lithium		0.565	mg/L	1	0.00500

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7995	Date Analyzed:	2004-03-04	Analyzed By:	RR
Prep Batch:	6978	Date Prepared:	2004-02-25	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		1.20	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		1.75	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		0.776	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.906	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.228	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		0.122	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		7.01	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		22.1	mg/L	10	0.0500
Dissolved Lithium		0.515	mg/L	1	0.00500

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7995	Date Analyzed:	2004-03-04	Analyzed By:	RR
Prep Batch:	6978	Date Prepared:	2004-02-25	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		5.20	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		0.222	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.718	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100

continued . . .

sample 27963 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Selenium		0.126	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		5.86	mg/L	10	0.00500
Dissolved Vanadium		0.0360	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		24.6	mg/L	10	0.0500
Dissolved Lithium		0.570	mg/L	1	0.00500

Method Blank (1) QC Batch: 7685

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 7685

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.0130	mg/L	0.013
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.0100	mg/L	0.01
Dissolved Boron		<0.00500	mg/L	0.005
Dissolved Barium		<0.0100	mg/L	0.01
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00500	mg/L	0.005
Dissolved Cobalt		<0.0250	mg/L	0.025
Dissolved Chromium		<0.0100	mg/L	0.01
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.0250	mg/L	0.025
Dissolved Lead		<0.0100	mg/L	0.01
Dissolved Selenium		<0.0100	mg/L	0.01
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.0250	mg/L	0.025
Dissolved Zinc		<0.0250	mg/L	0.025
Dissolved Silica		<0.0500	mg/L	0.05

Method Blank (1) QC Batch: 7960

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.0130	mg/L	0.013
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.0100	mg/L	0.01
Dissolved Boron		<0.0500	mg/L	0.05
Dissolved Barium		<0.100	mg/L	0.1
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.0250	mg/L	0.025
Dissolved Cobalt		<0.0250	mg/L	0.025
Dissolved Chromium		<0.0100	mg/L	0.01
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.0250	mg/L	0.025
Dissolved Lead		<0.0100	mg/L	0.01
Dissolved Selenium		<0.0500	mg/L	0.05
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.0250	mg/L	0.025
Dissolved Zinc		<0.0250	mg/L	0.025
Dissolved Silica		<0.0500	mg/L	0.05
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 7995

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.0130	mg/L	0.013
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.0100	mg/L	0.01
Dissolved Boron		<0.0500	mg/L	0.05
Dissolved Barium		<0.100	mg/L	0.1
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.0250	mg/L	0.025
Dissolved Cobalt		<0.0250	mg/L	0.025
Dissolved Chromium		<0.0100	mg/L	0.01
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.0250	mg/L	0.025
Dissolved Lead		<0.0100	mg/L	0.01
Dissolved Selenium		<0.0500	mg/L	0.05
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.0250	mg/L	0.025
Dissolved Zinc		<0.0250	mg/L	0.025
Dissolved Silica		<0.0500	mg/L	0.05
Dissolved Lithium		<0.00500	mg/L	0.005

Laboratory Control Spike (LCS-1) QC Batch: 7685

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0480	0.0490	mg/L	1	0.0500	<0.000188	96	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7685

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.138	0.138	mg/L	1	0.125	<0.00274	110	0	85 - 115	20
Dissolved Aluminum	0.942	0.941	mg/L	1	1.00	<0.0133	94	0	85 - 115	20
Dissolved Arsenic	0.479	0.479	mg/L	1	0.500	<0.00489	96	0	85 - 115	20
Dissolved Boron	0.0560	0.0550	mg/L	1	0.0500	<0.00544	112	2	85 - 115	20
Dissolved Barium	1.01	1.02	mg/L	1	1.00	<0.000450	101	1	85 - 114	20
Dissolved Beryllium	0.0280	0.0230	mg/L	1	0.0250	<0.000178	112	20	85 - 115	20
Dissolved Cadmium	0.267	0.266	mg/L	1	0.250	<0.00181	107	0	86 - 115	20
Dissolved Cobalt	0.280	0.283	mg/L	1	0.250	<0.00293	112	1	87 - 113	20
Dissolved Chromium	0.104	0.102	mg/L	1	0.100	<0.00357	104	2	85 - 115	20
Dissolved Copper	0.137	0.138	mg/L	1	0.125	<0.00127	110	1	85 - 113	20
Dissolved Iron	0.497	0.508	mg/L	1	0.500	<0.0103	99	2	85 - 115	20
Dissolved Manganese	0.251	0.251	mg/L	1	0.250	<0.000297	100	0	85 - 110	20
Dissolved Molybdenum	0.470	0.508	mg/L	1	0.500	<0.00690	94	8	85 - 115	20
Dissolved Nickel	0.278	0.268	mg/L	1	0.250	<0.000450	111	4	85 - 112	20
Dissolved Lead	0.486	0.511	mg/L	1	0.500	<0.00698	97	5	86.1 - 112	20
Dissolved Selenium	0.470	0.485	mg/L	1	0.500	<0.00556	94	3	85 - 113	20
Dissolved Tin	0.329	0.321	mg/L	1	0.300	<0.00759	110	2	85 - 115	20
Dissolved Strontium	0.0530	0.0530	mg/L	1	0.0500	<0.000281	106	0	85 - 115	20
Dissolved Vanadium	0.258	0.259	mg/L	1	0.250	<0.00105	103	0	85 - 115	20
Dissolved Zinc	0.264	0.271	mg/L	1	0.250	<0.00300	106	3	85 - 115	20
Dissolved Silica [1,2]	1.09	1.04	mg/L	1	1.00	<0.00490	109	5	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7960

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.130	0.129	mg/L	1	0.125	<0.000199	104	1	85 - 115	20
Dissolved Aluminum	0.973	0.958	mg/L	1	1.00	<0.00984	97	2	85 - 115	20
Dissolved Arsenic	0.477	0.464	mg/L	1	0.500	<0.00860	95	3	85 - 115	20
Dissolved Boron	0.0480	0.0450	mg/L	1	0.0500	<0.00366	96	6	85 - 115	20
Dissolved Barium	1.04	1.03	mg/L	1	1.00	<0.000984	104	1	85 - 115	20
Dissolved Beryllium	0.0220	0.0220	mg/L	1	0.0250	<0.000532	88	0	85 - 115	20
Dissolved Cadmium	0.243	0.240	mg/L	1	0.250	<0.000577	97	1	85 - 115	20
Dissolved Cobalt	0.254	0.250	mg/L	1	0.250	<0.000630	102	2	85 - 115	20
Dissolved Chromium	0.103	0.101	mg/L	1	0.100	<0.000437	103	2	85 - 115	20
Dissolved Copper	0.123	0.122	mg/L	1	0.125	<0.00164	98	1	85 - 115	20
Dissolved Iron	0.504	0.497	mg/L	1	0.500	<0.00281	101	1	85 - 115	20

continued ...

[1]Changed spike amount from 0.5 to 1 due to concentration of spiking solution
[2]Changed spike amount from 0.5 to 1 due to concentration of spiking solution

control spikes continued ...

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Manganese		0.250	0.248	mg/L	1	0.250	<0.00296	100	1	85 - 115	20
Dissolved Molybdenum		0.532	0.525	mg/L	1	0.500	<0.00118	106	1	85 - 115	20
Dissolved Nickel		0.244	0.240	mg/L	1	0.250	<0.00126	98	2	85 - 115	20
Dissolved Lead		0.511	0.504	mg/L	1	0.500	<0.00310	102	1	85 - 115	20
Dissolved Selenium		0.425	0.428	mg/L	1	0.500	<0.00370	85	1	85 - 115	20
Dissolved Tin		0.311	0.306	mg/L	1	0.300	<0.00238	104	2	85 - 115	20
Dissolved Strontium		0.0450	0.0440	mg/L	1	0.0500	<0.000457	90	2	85 - 115	20
Dissolved Vanadium		0.259	0.257	mg/L	1	0.250	<0.000651	104	1	85 - 115	20
Dissolved Zinc		0.239	0.235	mg/L	1	0.250	<0.00151	96	2	85 - 115	20
Dissolved Silica	[3][4]	1.05	1.01	mg/L	1	1.00	<0.00632	105	4	85 - 115	
Dissolved Lithium		0.0490	0.0490	mg/L	1	0.0500	<0.00197	98	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7995

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver		0.133	0.131	mg/L	1	0.125	<0.000199	106	2	85 - 115	20
Dissolved Aluminum		1.02	0.995	mg/L	1	1.00	<0.00984	102	2	85 - 115	20
Dissolved Arsenic		0.505	0.494	mg/L	1	0.500	<0.00860	101	2	85 - 115	20
Dissolved Boron		0.0450	0.0490	mg/L	1	0.0500	<0.00366	90	8	85 - 115	20
Dissolved Barium		1.05	1.03	mg/L	1	1.00	<0.000984	105	2	85 - 115	20
Dissolved Beryllium		0.0230	0.0220	mg/L	1	0.0250	<0.000532	92	4	85 - 115	20
Dissolved Cadmium		0.248	0.244	mg/L	1	0.250	<0.000577	99	2	85 - 115	20
Dissolved Cobalt		0.260	0.255	mg/L	1	0.250	<0.000630	104	2	85 - 115	20
Dissolved Chromium		0.106	0.103	mg/L	1	0.100	<0.000437	106	3	85 - 115	20
Dissolved Copper		0.130	0.131	mg/L	1	0.125	<0.00164	104	1	85 - 115	20
Dissolved Iron		0.557	0.518	mg/L	1	0.500	<0.00281	111	7	85 - 115	20
Dissolved Manganese		0.256	0.251	mg/L	1	0.250	<0.00296	102	2	85 - 115	20
Dissolved Molybdenum		0.538	0.528	mg/L	1	0.500	<0.00118	108	2	85 - 115	20
Dissolved Nickel		0.250	0.246	mg/L	1	0.250	<0.00126	100	2	85 - 115	20
Dissolved Lead		0.518	0.509	mg/L	1	0.500	<0.00310	104	2	85 - 115	20
Dissolved Selenium		0.441	0.439	mg/L	1	0.500	<0.00370	88	0	85 - 115	20
Dissolved Tin		0.314	0.307	mg/L	1	0.300	<0.00238	105	2	85 - 115	20
Dissolved Strontium		0.0490	0.0480	mg/L	1	0.0500	<0.000457	98	2	85 - 115	20
Dissolved Vanadium		0.263	0.258	mg/L	1	0.250	<0.000651	105	2	85 - 115	20
Dissolved Zinc		0.246	0.242	mg/L	1	0.250	<0.00151	98	2	85 - 115	20
Dissolved Silica	[5][6]	1.07	1.05	mg/L	1	1.00	<0.00632	107	2	85 - 115	
Dissolved Lithium		0.0560	0.0540	mg/L	1	0.0500	<0.00197	112	4	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7685

[3]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[4]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[5]Changed spike amount from 0.5 to 1 due to concentration of spiking solution.
[6]Changed spike amount from 0.5 to 1 due to concentration of spiking solution.

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	1.40	1.40	mg/L	1	0.0500	1.35	100	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7685

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver		0.138	0.136	mg/L	1	0.125	<0.00274	110	1	75 - 125	20
Dissolved Aluminum		1.22	1.18	mg/L	1	1.00	0.061	116	3	75 - 125	20
Dissolved Arsenic		0.518	0.518	mg/L	1	0.500	<0.00489	104	0	75 - 125	20
Dissolved Boron		2.90	2.90	mg/L	1	0.0500	2.85	100	0	75 - 125	20
Dissolved Barium		1.06	1.06	mg/L	1	1.00	0.024	104	0	75 - 125	20
Dissolved Beryllium		0.0240	0.0250	mg/L	1	0.0250	<0.000178	96	4	75 - 125	20
Dissolved Cadmium		0.253	0.248	mg/L	1	0.250	<0.00181	101	2	75 - 125	20
Dissolved Cobalt		0.306	0.300	mg/L	1	0.250	<0.00293	122	2	75 - 125	20
Dissolved Chromium		0.107	0.105	mg/L	1	0.100	<0.00357	107	2	75 - 125	20
Dissolved Copper		0.125	0.126	mg/L	1	0.125	<0.00127	100	1	75 - 125	20
Dissolved Iron		0.490	0.485	mg/L	1	0.500	<0.0103	98	1	75 - 125	20
Dissolved Manganese		0.249	0.246	mg/L	1	0.250	<0.000297	100	1	75 - 125	20
Dissolved Molybdenum	[7][8]	0.629	0.635	mg/L	1	0.500	0.157	94	1	75 - 125	20
Dissolved Nickel		0.312	0.301	mg/L	1	0.250	<0.000450	125	4	75 - 125	20
Dissolved Lead		0.485	0.489	mg/L	1	0.500	<0.00698	97	1	75 - 125	20
Dissolved Selenium		0.532	0.528	mg/L	1	0.500	<0.00556	106	1	75 - 125	20
Dissolved Tin		0.287	0.291	mg/L	1	0.300	<0.00759	96	1	75 - 125	20
Dissolved Strontium		11.2	11.2	mg/L	1	0.0500	11.15	100	0	75 - 125	20
Dissolved Vanadium		0.332	0.331	mg/L	1	0.250	0.03	121	0	75 - 125	20
Dissolved Zinc		0.249	0.251	mg/L	1	0.250	<0.00300	100	1	75 - 125	20
Dissolved Silica	[9][10]	25.1	25.1	mg/L	1	1.00	24.2	90	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7960

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver		0.127	0.124	mg/L	1	0.125	<0.000199	102	2	75 - 125	20
Dissolved Aluminum		1.07	1.04	mg/L	1	1.00	<0.00984	107	3	75 - 125	20
Dissolved Arsenic		0.445	0.438	mg/L	1	0.500	<0.00860	89	2	75 - 125	20
Dissolved Boron	[11][12]	2.87	2.82	mg/L	1	0.0500	2.69	360	2	75 - 125	20
Dissolved Barium		0.889	1.08	mg/L	1	1.00	<0.000984	89	19	75 - 125	20
Dissolved Beryllium		0.0190	0.0200	mg/L	1	0.0250	<0.000532	76	5	75 - 125	20
Dissolved Cadmium		0.204	0.200	mg/L	1	0.250	<0.000577	82	2	75 - 125	20
Dissolved Cobalt		0.211	0.210	mg/L	1	0.250	<0.000630	84	0	75 - 125	20
Dissolved Chromium		0.0900	0.0880	mg/L	1	0.100	<0.000437	90	2	75 - 125	20
Dissolved Copper		0.127	0.124	mg/L	1	0.125	<0.00164	102	2	75 - 125	20

continued ...

[7]Changed spike amount from 50 to 0.5 due to concentration of spiking solution
[8]Changed spike amount from 50 to 0.5 due to concentration of spiking solution
[9]Changed spike amount from 0.5 to 1 due to concentration of spiking solution
[10]Changed spike amount from 0.5 to 1 due to concentration of spiking solution
[11]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[12]MS recovery invalid due to required dilution. LCS demonstrates process under control.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Iron		0.433	0.421	mg/L	1	0.500	<0.00281	87	3	75 - 125	20
Dissolved Manganese		0.213	0.210	mg/L	1	0.250	<0.00296	85	1	75 - 125	20
Dissolved Molybdenum	[13][14]	0.613	0.603	mg/L	1	0.500	0.014	120	2	75 - 125	20
Dissolved Nickel		0.286	0.200	mg/L	1	0.250	<0.00126	114	35	75 - 125	20
Dissolved Lead		0.520	0.537	mg/L	1	0.500	<0.00310	104	3	75 - 125	20
Dissolved Selenium		0.482	0.471	mg/L	1	0.500	<0.00370	96	2	75 - 125	20
Dissolved Tin		0.254	0.252	mg/L	1	0.300	<0.00238	85	1	75 - 125	20
Dissolved Strontium	[15][16]	9.17	9.44	mg/L	1	0.0500	9.14	60	3	75 - 125	20
Dissolved Vanadium		0.255	0.250	mg/L	1	0.250	<0.000651	102	2	75 - 125	20
Dissolved Zinc		0.222	0.200	mg/L	1	0.250	<0.00151	89	10	75 - 125	20
Dissolved Silica	[17][18]	26.7	26.0	mg/L	1	1.00	24.7	200	3	75 - 125	
Dissolved Lithium		0.595	0.595	mg/L	1	0.0500	0.545	100	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7995

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver		0.120	0.122	mg/L	1	0.125	<0.000199	96	2	75 - 125	20
Dissolved Aluminum		1.02	1.04	mg/L	1	1.00	<0.00984	102	2	75 - 125	20
Dissolved Arsenic		0.451	0.454	mg/L	1	0.500	<0.00860	90	1	75 - 125	20
Dissolved Boron		5.25	5.25	mg/L	1	0.0500	5.2	100	0	75 - 125	20
Dissolved Barium		0.872	0.883	mg/L	1	1.00	<0.000984	87	1	75 - 125	20
Dissolved Beryllium		0.0200	0.0220	mg/L	1	0.0250	<0.000532	80	10	75 - 125	20
Dissolved Cadmium		0.197	0.201	mg/L	1	0.250	<0.000577	79	2	75 - 125	20
Dissolved Cobalt		0.205	0.212	mg/L	1	0.250	<0.000630	82	3	75 - 125	20
Dissolved Chromium		0.338	0.330	mg/L	1	0.100	0.222	116	2	75 - 125	20
Dissolved Copper		0.138	0.136	mg/L	1	0.125	<0.00164	110	1	75 - 125	20
Dissolved Iron		0.500	0.501	mg/L	1	0.500	0.04	92	0	75 - 125	20
Dissolved Manganese		0.211	0.214	mg/L	1	0.250	<0.00296	84	1	75 - 125	20
Dissolved Molybdenum	[19][20]	1.28	1.20	mg/L	1	0.500	0.718	112	6	75 - 125	20
Dissolved Nickel		0.198	0.201	mg/L	1	0.250	<0.00126	79	2	75 - 125	20
Dissolved Lead		0.391	0.401	mg/L	1	0.500	<0.00310	78	2	75 - 125	20
Dissolved Selenium		0.634	0.628	mg/L	1	0.500	0.126	102	1	75 - 125	20
Dissolved Tin		0.282	0.288	mg/L	1	0.300	<0.00238	94	2	75 - 125	20
Dissolved Strontium		5.91	5.91	mg/L	1	0.0500	5.86	100	0	75 - 125	20
Dissolved Vanadium		0.246	0.252	mg/L	1	0.250	0.036	84	2	75 - 125	20
Dissolved Zinc		0.206	0.210	mg/L	1	0.250	<0.00151	82	2	75 - 125	20
Dissolved Silica	[21][22]	1.10	1.10	mg/L	1	1.00	<0.00632	110	0	75 - 125	
Dissolved Lithium		0.620	0.620	mg/L	1	0.0500	0.57	100	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[13]Changed spike amount from 50 to 0.5 due to concentration in spiking solution.
[14]Changed spike amount from 50 to 0.5 due to concentration of spiking solution.
[15]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[16]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[17]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[18]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[19]Changed spike amount from 50 to 0.5 due to concentration of spiking solution.
[20]Changed spike amount from 50 to 0.5 due to concentration of spiking solution
[21]Changed spike amount from 0.5 to 1 due to concentration of spiking solution.
[22]Changed spike amount from 0.5 to 1 due to concentration of spiking solution.

Standard (ICV-1) QC Batch: 7685

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.03	103	90 - 110	2004-02-20

Standard (ICV-1) QC Batch: 7685

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.134	107	90 - 110	2004-02-20
Dissolved Aluminum		mg/L	1.00	1.01	101	90 - 110	2004-02-20
Dissolved Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-02-20
Dissolved Boron		mg/L	1.00	1.02	102	90 - 110	2004-02-20
Dissolved Barium		mg/L	1.00	1.03	103	90 - 110	2004-02-20
Dissolved Beryllium		mg/L	1.00	1.00	100	90 - 110	2004-02-20
Dissolved Cadmium		mg/L	1.00	1.01	101	95 - 105	2004-02-20
Dissolved Cobalt		mg/L	1.00	1.04	104	90 - 110	2004-02-20
Dissolved Chromium		mg/L	1.00	1.04	104	90 - 110	2004-02-20
Dissolved Copper		mg/L	1.00	1.01	101	90 - 110	2004-02-20
Dissolved Iron		mg/L	1.00	1.04	104	90 - 110	2004-02-20
Dissolved Manganese		mg/L	1.00	1.02	102	90 - 110	2004-02-20
Dissolved Molybdenum		mg/L	1.00	1.00	100	90 - 110	2004-02-20
Dissolved Nickel		mg/L	1.00	0.985	98	90 - 110	2004-02-20
Dissolved Lead		mg/L	1.00	0.985	98	90 - 110	2004-02-20
Dissolved Selenium		mg/L	1.00	0.953	95	95 - 105	2004-02-20
Dissolved Tin		mg/L	1.00	0.955	96	90 - 110	2004-02-20
Dissolved Strontium		mg/L	1.00	1.03	103	95 - 105	2004-02-20
Dissolved Vanadium		mg/L	1.00	1.05	105	95 - 105	2004-02-20
Dissolved Zinc		mg/L	1.00	0.987	99	90 - 110	2004-02-20
Dissolved Silica		mg/L	5.00	5.25	105	95 - 105	2004-02-20

Standard (CCV-1) QC Batch: 7685

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.06	106	90 - 110	2004-02-20

Standard (CCV-1) QC Batch: 7685

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.129	103	90 - 110	2004-02-20
Dissolved Aluminum		mg/L	1.00	0.998	100	90 - 110	2004-02-20
Dissolved Arsenic		mg/L	1.00	1.03	103	90 - 110	2004-02-20
Dissolved Boron		mg/L	1.00	1.02	102	90 - 110	2004-02-20
Dissolved Barium		mg/L	1.00	1.08	108	90 - 110	2004-02-20
Dissolved Beryllium		mg/L	1.00	1.02	102	90 - 110	2004-02-20

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Cadmium		mg/L	1.00	1.02	102	90 - 110	2004-02-20
Dissolved Cobalt		mg/L	1.00	1.04	104	90 - 110	2004-02-20
Dissolved Chromium		mg/L	1.00	1.05	105	90 - 110	2004-02-20
Dissolved Copper		mg/L	1.00	1.02	102	90 - 110	2004-02-20
Dissolved Iron		mg/L	1.00	1.06	106	90 - 110	2004-02-20
Dissolved Manganese		mg/L	1.00	1.03	103	90 - 110	2004-02-20
Dissolved Molybdenum		mg/L	1.00	1.02	102	90 - 110	2004-02-20
Dissolved Nickel		mg/L	1.00	0.985	98	90 - 110	2004-02-20
Dissolved Lead		mg/L	1.00	0.999	100	90 - 110	2004-02-20
Dissolved Selenium		mg/L	1.00	1.04	104	90 - 110	2004-02-20
Dissolved Tin		mg/L	1.00	0.996	100	90 - 110	2004-02-20
Dissolved Strontium		mg/L	1.00	1.08	108	90 - 110	2004-02-20
Dissolved Vanadium		mg/L	1.00	1.06	106	90 - 110	2004-02-20
Dissolved Zinc		mg/L	1.00	0.992	99	90 - 110	2004-02-20
Dissolved Silica		mg/L	5.00	5.39	108	90 - 110	2004-02-20

Standard (ICV-1) QC Batch: 7960

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.125	100	90 - 110	2004-03-03
Dissolved Aluminum		mg/L	1.00	0.996	100	90 - 110	2004-03-03
Dissolved Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-03-03
Dissolved Boron		mg/L	1.00	1.04	104	90 - 110	2004-03-03
Dissolved Barium		mg/L	1.00	1.00	100	90 - 110	2004-03-03
Dissolved Beryllium		mg/L	1.00	1.00	100	90 - 110	2004-03-03
Dissolved Cadmium		mg/L	1.00	1.01	101	90 - 110	2004-03-03
Dissolved Cobalt		mg/L	1.00	1.00	100	90 - 110	2004-03-03
Dissolved Chromium		mg/L	1.00	1.01	101	90 - 110	2004-03-03
Dissolved Copper		mg/L	1.00	0.992	99	90 - 110	2004-03-03
Dissolved Iron		mg/L	1.00	1.01	101	90 - 110	2004-03-03
Dissolved Manganese		mg/L	1.00	1.01	101	90 - 110	2004-03-03
Dissolved Molybdenum		mg/L	1.00	1.00	100	90 - 110	2004-03-03
Dissolved Nickel		mg/L	1.00	1.01	101	90 - 110	2004-03-03
Dissolved Lead		mg/L	1.00	1.00	100	90 - 110	2004-03-03
Dissolved Selenium		mg/L	1.00	1.00	100	90 - 110	2004-03-03
Dissolved Tin		mg/L	1.00	1.00	100	90 - 110	2004-03-03
Dissolved Strontium		mg/L	1.00	1.01	101	90 - 110	2004-03-03
Dissolved Vanadium		mg/L	1.00	1.00	100	90 - 110	2004-03-03
Dissolved Zinc		mg/L	1.00	1.01	101	90 - 110	2004-03-03
Dissolved Silica		mg/L	5.00	4.99	100	95 - 105	2004-03-03
Dissolved Lithium		mg/L	1.00	1.01	101	90 - 110	2004-03-03

Standard (CCV-1) QC Batch: 7960

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.122	98	90 - 110	2004-03-03
Dissolved Aluminum		mg/L	1.00	0.957	96	90 - 110	2004-03-03
Dissolved Arsenic		mg/L	1.00	0.975	98	90 - 110	2004-03-03
Dissolved Boron		mg/L	1.00	0.978	98	90 - 110	2004-03-03
Dissolved Barium		mg/L	1.00	0.977	98	90 - 110	2004-03-03
Dissolved Beryllium		mg/L	1.00	0.962	96	90 - 110	2004-03-03
Dissolved Cadmium		mg/L	1.00	0.976	98	90 - 110	2004-03-03
Dissolved Cobalt		mg/L	1.00	0.978	98	90 - 110	2004-03-03
Dissolved Chromium		mg/L	1.00	0.977	98	90 - 110	2004-03-03
Dissolved Copper		mg/L	1.00	0.966	97	90 - 110	2004-03-03
Dissolved Iron		mg/L	1.00	0.978	98	90 - 110	2004-03-03
Dissolved Manganese		mg/L	1.00	0.978	98	90 - 110	2004-03-03
Dissolved Molybdenum		mg/L	1.00	0.966	97	90 - 110	2004-03-03
Dissolved Nickel		mg/L	1.00	0.976	98	90 - 110	2004-03-03
Dissolved Lead		mg/L	1.00	0.974	97	90 - 110	2004-03-03
Dissolved Selenium		mg/L	1.00	0.978	98	90 - 110	2004-03-03
Dissolved Tin		mg/L	1.00	0.979	98	90 - 110	2004-03-03
Dissolved Strontium		mg/L	1.00	1.04	104	90 - 110	2004-03-03
Dissolved Vanadium		mg/L	1.00	0.969	97	90 - 110	2004-03-03
Dissolved Zinc		mg/L	1.00	0.983	98	90 - 110	2004-03-03
Dissolved Silica		mg/L	5.00	4.85	97	90 - 110	2004-03-03
Dissolved Lithium		mg/L	1.00	0.969	97	90 - 110	2004-03-03

Standard (ICV-1) QC Batch: 7995

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.126	101	90 - 110	2004-03-04
Dissolved Aluminum		mg/L	1.00	0.994	99	90 - 110	2004-03-04
Dissolved Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Boron		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Barium		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Beryllium		mg/L	1.00	1.00	100	90 - 110	2004-03-04
Dissolved Cadmium		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Cobalt		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Chromium		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Copper		mg/L	1.00	1.00	100	90 - 110	2004-03-04
Dissolved Iron		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Manganese		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Molybdenum		mg/L	1.00	1.00	100	90 - 110	2004-03-04
Dissolved Nickel		mg/L	1.00	1.00	100	90 - 110	2004-03-04
Dissolved Lead		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Selenium		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Tin		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Strontium		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Vanadium		mg/L	1.00	1.00	100	90 - 110	2004-03-04
Dissolved Zinc		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Silica		mg/L	5.00	4.99	100	95 - 105	2004-03-04
Dissolved Lithium		mg/L	1.00	1.01	101	90 - 110	2004-03-04

Standard (CCV-1) QC Batch: 7995

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.126	101	90 - 110	2004-03-04
Dissolved Aluminum		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Arsenic		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Boron		mg/L	1.00	0.975	98	90 - 110	2004-03-04
Dissolved Barium		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Cadmium		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Cobalt		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Chromium		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Copper		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Iron		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Manganese		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Nickel		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Lead		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Selenium		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Tin		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Strontium		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Vanadium		mg/L	1.00	1.01	101	90 - 110	2004-03-04
Dissolved Zinc		mg/L	1.00	1.02	102	90 - 110	2004-03-04
Dissolved Silica		mg/L	5.00	4.90	98	90 - 110	2004-03-04
Dissolved Lithium		mg/L	1.00	1.01	101	90 - 110	2004-03-04

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7699	Date Analyzed:	2004-02-18	Analyzed By:	BC
Prep Batch:	6766	Date Prepared:	2004-02-13	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		442	mg/L	1	0.500
Dissolved Magnesium		361	mg/L	1	0.500
Dissolved Potassium		87.2	mg/L	1	0.500
Dissolved Sodium		771	mg/L	1	0.500

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7699	Date Analyzed:	2004-02-18	Analyzed By:	BC
Prep Batch:	6766	Date Prepared:	2004-02-13	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		439	mg/L	1	0.500
Dissolved Magnesium		360	mg/L	1	0.500
Dissolved Potassium		87.1	mg/L	1	0.500
Dissolved Sodium		742	mg/L	1	0.500

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7794	Date Analyzed:	2004-02-23	Analyzed By:	BC
Prep Batch:	6887	Date Prepared:	2004-02-20	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		477	mg/L	1	0.500
Dissolved Magnesium		401	mg/L	1	0.500
Dissolved Potassium		88.9	mg/L	1	0.500
Dissolved Sodium		524	mg/L	1	0.500

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7794	Date Analyzed:	2004-02-23	Analyzed By:	BC
Prep Batch:	6887	Date Prepared:	2004-02-20	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		269	mg/L	1	0.500
Dissolved Magnesium		474	mg/L	1	0.500

continued . . .

sample 27616 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Potassium		106	mg/L	1	0.500
Dissolved Sodium		1700	mg/L	1	0.500

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7794	Date Analyzed:	2004-02-23	Analyzed By:	BC
Prep Batch:	6887	Date Prepared:	2004-02-20	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		317	mg/L	1	0.500
Dissolved Magnesium		590	mg/L	1	0.500
Dissolved Potassium		113	mg/L	1	0.500
Dissolved Sodium		2560	mg/L	1	0.500

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7794	Date Analyzed:	2004-02-23	Analyzed By:	BC
Prep Batch:	6887	Date Prepared:	2004-02-20	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		460	mg/L	1	0.500
Dissolved Magnesium		567	mg/L	1	0.500
Dissolved Potassium		138	mg/L	1	0.500
Dissolved Sodium		1090	mg/L	1	0.500

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7794	Date Analyzed:	2004-02-23	Analyzed By:	BC
Prep Batch:	6887	Date Prepared:	2004-02-20	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		422	mg/L	1	0.500
Dissolved Magnesium		354	mg/L	1	0.500
Dissolved Potassium		92.5	mg/L	1	0.500
Dissolved Sodium		832	mg/L	1	0.500

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A

QC Batch: 7955 Date Analyzed: 2004-03-02 Analyzed By: BC
Prep Batch: 6978 Date Prepared: 2004-02-25 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		381	mg/L	1	0.500
Dissolved Magnesium		664	mg/L	1	0.500
Dissolved Potassium		122	mg/L	1	0.500
Dissolved Sodium		3110	mg/L	1	0.500

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis: Salts, Dissolved Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 7955 Date Analyzed: 2004-03-02 Analyzed By: BC
Prep Batch: 6978 Date Prepared: 2004-02-25 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		465	mg/L	1	0.500
Dissolved Magnesium		1310	mg/L	1	0.500
Dissolved Potassium		221	mg/L	1	0.500
Dissolved Sodium		6060	mg/L	1	0.500

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis: Salts, Dissolved Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 7955 Date Analyzed: 2004-03-02 Analyzed By: BC
Prep Batch: 6978 Date Prepared: 2004-02-25 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		440	mg/L	1	0.500
Dissolved Magnesium		949	mg/L	1	0.500
Dissolved Potassium		137	mg/L	1	0.500
Dissolved Sodium		3660	mg/L	1	0.500

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis: Salts, Dissolved Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 7955 Date Analyzed: 2004-03-02 Analyzed By: BC
Prep Batch: 6978 Date Prepared: 2004-02-25 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		379	mg/L	1	0.500
Dissolved Magnesium		670	mg/L	1	0.500
Dissolved Potassium		121	mg/L	1	0.500
Dissolved Sodium		3080	mg/L	1	0.500

Method Blank (1) QC Batch: 7699

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5
Dissolved Potassium		<0.500	mg/L	0.5
Dissolved Sodium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 7794

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5
Dissolved Potassium		<0.500	mg/L	0.5
Dissolved Sodium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 7955

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5
Dissolved Potassium		<0.500	mg/L	0.5
Dissolved Sodium		<0.500	mg/L	0.5

Laboratory Control Spike (LCS-1) QC Batch: 7699

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	91.0	91.0	mg/L	1	100	<0.102	91	0	85 - 115	20
Dissolved Magnesium	91.7	92.1	mg/L	1	100	<0.110	92	0	85 - 115	20
Dissolved Potassium	96.9	99.7	mg/L	1	100	<0.101	97	3	85 - 115	20
Dissolved Sodium	93.1	94.8	mg/L	1	100	<0.120	93	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7794

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	95.3	92.1	mg/L	1	100	<0.102	95	3	85 - 115	20
Dissolved Magnesium	92.8	91.6	mg/L	1	100	<0.110	93	1	85 - 115	20
Dissolved Potassium	96.6	96.3	mg/L	1	100	<0.101	97	0	85 - 115	20
Dissolved Sodium	99.4	97.3	mg/L	1	100	<0.120	99	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7955

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	95.4	95.3	mg/L	1	100	<0.102	95	0	85 - 115	20
Dissolved Magnesium	97.1	95.2	mg/L	1	100	<0.110	97	2	85 - 115	20
Dissolved Potassium	96.5	93.9	mg/L	1	100	<0.101	96	3	85 - 115	20
Dissolved Sodium	99.1	98.3	mg/L	1	100	<0.120	99	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) QC Batch: 7699

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	[12]	514	508	mg/L	1	100	442	72	1	75 - 125	20
Dissolved Magnesium		460	436	mg/L	1	100	361	99	5	75 - 125	20
Dissolved Potassium		196	189	mg/L	1	100	87.2	109	4	75 - 125	20
Dissolved Sodium		884	879	mg/L	1	100	771	113	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) QC Batch: 7794

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	[34]	608	484	mg/L	1	100	477	131	23	75 - 125	20
Dissolved Magnesium	[56]	529	430	mg/L	1	100	401	128	21	75 - 125	20
Dissolved Potassium	[7]	197	171	mg/L	1	100	88.9	108	14	75 - 125	20
Dissolved Sodium	[89]	654	513	mg/L	1	100	524	130	24	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7955

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium		494	458	mg/L	1	100	379	115	8	75 - 125	20
Dissolved Magnesium	[1011]	864	811	mg/L	1	100	670	194	6	75 - 125	20
Dissolved Potassium		202	201	mg/L	1	100	121	81	0	75 - 125	20
Dissolved Sodium	[1213]	3650	3330	mg/L	1	100	3080	570	9	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[1]ms recovery out of limits due to matrix effect, ucs lcs/lcsd
[2]ms recovery out of limits due to matrix effect, ucs lcs/lcsd
[3]ms recovery out of limits due to matrix effect/spiking error, use lcs/lcsd
[4]ms recovery out of limits due to matrix effect/spiking error, use lcs/lcsd
[5]ms recovery out of limits due to matrix effect/spiking error, use lcs/lcsd
[6]ms recovery out of limits due to matrix effect/spiking error, use lcs/lcsd
[7]ms recovery out of limits due to matrix effect/spiking error, use lcs/lcsd
[8]ms recovery out of limits due to matrix effect/spiking error, use lcs/lcsd
[9]ms recovery out of limits due to matrix effect/spiking error, use lcs/lcsd
[10]ms recovery out of limits due to matrix effect, use lcs/lcsd
[11]ms recovery out of limits due to matrix effect, use lcs/lcsd
[12]ms recovery out of limits due to matrix effect, use lcs/lcsd
[13]ms recovery out of limits due to matrix effect, use lcs/lcsd

Standard (CCV-1) QC Batch: 7699

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	23.2	93	90 - 110	2004-02-18
Dissolved Magnesium		mg/L	25.0	23.7	95	90 - 110	2004-02-18
Dissolved Potassium		mg/L	25.0	24.8	99	90 - 110	2004-02-18
Dissolved Sodium		mg/L	25.0	24.0	96	90 - 110	2004-02-18

Standard (CCV-2) QC Batch: 7699

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	23.2	93	90 - 110	2004-02-18
Dissolved Magnesium		mg/L	25.0	23.7	95	90 - 110	2004-02-18
Dissolved Potassium		mg/L	25.0	24.8	99	90 - 110	2004-02-18
Dissolved Sodium		mg/L	25.0	24.0	96	90 - 110	2004-02-18

Standard (CCV-1) QC Batch: 7794

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.0	100	90 - 110	2004-02-23
Dissolved Magnesium		mg/L	25.0	25.2	101	90 - 110	2004-02-23
Dissolved Potassium		mg/L	25.0	24.5	98	90 - 110	2004-02-23
Dissolved Sodium		mg/L	25.0	25.8	103	90 - 110	2004-02-23

Standard (CCV-2) QC Batch: 7794

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.4	98	90 - 110	2004-02-23
Dissolved Magnesium		mg/L	25.0	24.4	98	90 - 110	2004-02-23
Dissolved Potassium		mg/L	25.0	25.4	102	90 - 110	2004-02-23
Dissolved Sodium		mg/L	25.0	24.9	100	90 - 110	2004-02-23

Standard (ICV-1) QC Batch: 7955

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.4	102	90 - 110	2004-03-02
Dissolved Magnesium		mg/L	25.0	25.4	102	90 - 110	2004-03-02
Dissolved Potassium		mg/L	25.0	25.4	102	90 - 110	2004-03-02
Dissolved Sodium		mg/L	25.0	25.8	103	90 - 110	2004-03-02

Standard (CCV-1) QC Batch: 7955

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.5	102	90 - 110	2004-03-02
Dissolved Magnesium		mg/L	25.0	25.2	101	90 - 110	2004-03-02
Dissolved Potassium		mg/L	25.0	25.2	101	90 - 110	2004-03-02
Dissolved Sodium		mg/L	25.0	25.2	101	90 - 110	2004-03-02

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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 13 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7933	Date Analyzed:	2004-03-02	Analyzed By:	JH
Prep Batch:	6842	Date Prepared:	2004-02-13	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.05	μg/L	1	2.50	82	35.8 - 121

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7933	Date Analyzed:	2004-03-02	Analyzed By:	JH
Prep Batch:	6842	Date Prepared:	2004-02-13	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.47	μg/L	1	2.50	99	35.8 - 121

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7932	Date Analyzed:	2004-03-02	Analyzed By:	JH
Prep Batch:	6919	Date Prepared:	2004-02-20	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.56	μg/L	1	2.50	102	35.8 - 121

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7932	Date Analyzed:	2004-03-02	Analyzed By:	JH
Prep Batch:	6919	Date Prepared:	2004-02-20	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.52	μg/L	1	2.50	101	35.8 - 121

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7932	Date Analyzed:	2004-03-02	Analyzed By:	JH
Prep Batch:	6919	Date Prepared:	2004-02-20	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.66	μg/L	1	2.50	106	35.8 - 121

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7932	Date Analyzed:	2004-03-02	Analyzed By:	JH
Prep Batch:	6919	Date Prepared:	2004-02-20	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.15	μg/L	1	2.50	46	35.8 - 121

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7932	Date Analyzed:	2004-03-02	Analyzed By:	JH
Prep Batch:	6919	Date Prepared:	2004-02-20	Prepared By:	JH

continued . . .

sample 27725 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.76	μg/L	1	2.50	110	35.8 - 121

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7934	Date Analyzed:	2004-03-02	Analyzed By:	JH
Prep Batch:	7020	Date Prepared:	2004-02-25	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.46	μg/L	1	2.50	98	35.8 - 121

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7934	Date Analyzed:	2004-03-02	Analyzed By:	JH

Prep Batch: 7020 Date Prepared: 2004-02-25 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.36	μg/L	1	2.50	94	35.8 - 121

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis: Explosives (8330) Analytical Method: S 8330-C18 Prep Method: S 3535A
QC Batch: 7934 Date Analyzed: 2004-03-02 Analyzed By: JH
Prep Batch: 7020 Date Prepared: 2004-02-25 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.74	μg/L	1	2.50	110	35.8 - 121

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis: Explosives (8330) Analytical Method: S 8330-C18 Prep Method: S 3535A
QC Batch: 7934 Date Analyzed: 2004-03-02 Analyzed By: JH
Prep Batch: 7020 Date Prepared: 2004-02-25 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.50	μg/L	1	2.50	100	35.8 - 121

Method Blank (1) QC Batch: 7932

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.82	μg/L	1	2.50	113	35.8 - 121

Method Blank (1) QC Batch: 7933

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.76	μg/L	1	2.50	110	35.8 - 121

Method Blank (1) QC Batch: 7934

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.80	μg/L	1	2.50	112	35.8 - 121

Laboratory Control Spike (LCS-1) QC Batch: 7932

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.30	2.47	μg/L	1	2.50	<0.196	92	7	52.3 - 129	20
RDX	2.37	2.50	μg/L	1	2.50	<0.364	95	5	65.7 - 117	20
1,3,5-Trinitrobenzene	1.85	1.81	μg/L	1	2.50	<0.114	74	2	30.3 - 141	20
1,3-Dinitrobenzene	2.17	2.28	μg/L	1	2.50	<0.108	87	5	45.9 - 139	20
Tetryl	2.88	2.81	μg/L	1	2.50	<0.200	115	2	49 - 129	20
Nitrobenzene	2.67	2.93	μg/L	1	2.50	<0.0990	107	9	0 - 133	20
TNT [1]	1.67	1.76	μg/L	1	2.50	<0.116	67	5	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.10	2.19	μg/L	1	2.50	<0.146	84	4	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.34	2.48	μg/L	1	2.50	<0.183	94	6	44.8 - 130	20
2-NT	2.70	2.68	μg/L	1	2.50	<0.139	108	1	44.9 - 128	20

continued . . .

[1] within control limits of 47.9-135%

control spikes continued ...

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
4-NT	[2]	3.10	2.58	μg/L	1	2.50	<0.0851	124	18	47.8 - 123	20
3-NT		3.40	3.41	μg/L	1	2.50	<0.176	136	0	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.47	2.70	μg/L	1	2.50	99	108	42 - 125

Laboratory Control Spike (LCS-1) QC Batch: 7933

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX		2.02	1.72	μg/L	1	2.50	<0.196	81	16	52.3 - 129	20
RDX		2.08	1.75	μg/L	1	2.50	<0.364	83	17	65.7 - 117	20
1,3,5-Trinitrobenzene		1.79	1.52	μg/L	1	2.50	<0.114	72	16	30.3 - 141	20
1,3-Dinitrobenzene		1.97	1.61	μg/L	1	2.50	<0.108	79	20	45.9 - 139	20
Tetryl		2.03	2.11	μg/L	1	2.50	<0.200	81	4	49 - 129	20
Nitrobenzene		2.40	1.98	μg/L	1	2.50	<0.0990	96	19	0 - 133	20
TNT	[3][4]	1.60	1.51	μg/L	1	2.50	<0.116	64	6	67.8 - 126	20
4-amino-DNT / 2-amino-DNT		1.95	1.60	μg/L	1	2.50	<0.146	78	20	47.9 - 135	20
2,6-DNT / 2,4-DNT		2.06	1.71	μg/L	1	2.50	<0.183	82	18	44.8 - 130	20
2-NT		2.08	1.78	μg/L	1	2.50	<0.139	83	16	44.9 - 128	20
4-NT		1.69	1.84	μg/L	1	2.50	<0.0851	68	8	47.8 - 123	20
3-NT		2.02	2.17	μg/L	1	2.50	<0.176	81	7	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	1.97	1.66	μg/L	1	2.50	79	66	42 - 125

Laboratory Control Spike (LCS-1) QC Batch: 7934

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX		2.10	2.28	μg/L	1	2.50	<0.196	84	8	52.3 - 129	20
RDX		2.17	2.23	μg/L	1	2.50	<0.364	87	3	65.7 - 117	20
1,3,5-Trinitrobenzene		1.83	1.81	μg/L	1	2.50	<0.114	73	1	30.3 - 141	20
1,3-Dinitrobenzene		1.97	2.10	μg/L	1	2.50	<0.108	79	6	45.9 - 139	20
Tetryl		2.53	2.40	μg/L	1	2.50	<0.200	101	5	49 - 129	20
Nitrobenzene		2.36	2.53	μg/L	1	2.50	<0.0990	94	7	0 - 133	20
TNT	[5]	1.55	1.70	μg/L	1	2.50	<0.116	62	9	67.8 - 126	20
4-amino-DNT / 2-amino-DNT		1.89	2.10	μg/L	1	2.50	<0.146	76	10	47.9 - 135	20
2,6-DNT / 2,4-DNT		2.05	2.25	μg/L	1	2.50	<0.183	82	9	44.8 - 130	20
2-NT		2.23	2.14	μg/L	1	2.50	<0.139	89	4	44.9 - 128	20

continued ...

[2] within control limits of 42-125%
[3] Within control limits of 47.9-135%
[4] within control limits of 47.9-135%
[5] within control limits of 47.9-135%

control spikes continued ...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
4-NT	2.67	2.70	μg/L	1	2.50	<0.0851	107	1	47.8 - 123	20
3-NT	2.92	2.84	μg/L	1	2.50	<0.176	117	3	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.12	2.37	μg/L	1	2.50	85	95	42 - 125

Matrix Spike (MS-1) QC Batch: 7934

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.11	2.22	μg/L	1	2.50	<0.196	84	5	45 - 120	20
RDX	2.48	2.55	μg/L	1	2.50	<0.364	99	3	44.2 - 103	20
1,3,5-Trinitrobenzene	1.58	1.73	μg/L	1	2.50	<0.114	63	9	20.9 - 105	20
1,3-Dinitrobenzene	1.98	1.89	μg/L	1	2.50	<0.108	79	5	35.8 - 121	20
Tetryl	2.24	2.10	μg/L	1	2.50	<0.200	90	6	30.6 - 105	20
Nitrobenzene	2.34	2.23	μg/L	1	2.50	<0.0990	94	5	0 - 109	20
TNT	1.53	1.54	μg/L	1	2.50	<0.116	61	1	17.7 - 134	20
4-amino-DNT / 2-amino-DNT	1.95	1.85	μg/L	1	2.50	<0.146	78	5	43.7 - 97.4	20
2,6-DNT / 2,4-DNT	2.12	2.10	μg/L	1	2.50	<0.183	85	1	11.1 - 123	20
2-NT	2.16	2.20	μg/L	1	2.50	<0.139	86	2	11.1 - 113	20
4-NT	1.82	1.60	μg/L	1	2.50	<0.0851	73	13	30.2 - 114	20
3-NT	2.43	2.35	μg/L	1	2.50	<0.176	97	3	53.4 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.17	2.12	μg/L	1	2.5	87	85	27.9 - 112

Standard (ICV-1) QC Batch: 7932

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		μg/L	500	526	105	85 - 115	2004-03-02
RDX		μg/L	500	560	112	85 - 115	2004-03-02
1,3,5-Trinitrobenzene		μg/L	500	443	89	85 - 115	2004-03-02
1,3-Dinitrobenzene		μg/L	500	469	94	85 - 115	2004-03-02
Tetryl		μg/L	500	543	109	85 - 115	2004-03-02
Nitrobenzene		μg/L	500	559	112	85 - 115	2004-03-02
TNT		μg/L	500	479	96	85 - 115	2004-03-02
4-amino-DNT / 2-amino-DNT		μg/L	500	497	99	85 - 115	2004-03-02
2,6-DNT / 2,4-DNT		μg/L	500	513	103	85 - 115	2004-03-02
2-NT		μg/L	500	491	98	85 - 115	2004-03-02
4-NT		μg/L	500	464	93	85 - 115	2004-03-02
3-NT		μg/L	500	507	101	85 - 115	2004-03-02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.40	μg/L	1	2.50	96	85 - 115

Standard (CCV-1) QC Batch: 7932

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		μg/L	500	511	102	85 - 115	2004-03-02
RDX		μg/L	500	549	110	85 - 115	2004-03-02
1,3,5-Trinitrobenzene		μg/L	500	461	92	85 - 115	2004-03-02
1,3-Dinitrobenzene		μg/L	500	469	94	85 - 115	2004-03-02
Tetryl		μg/L	500	519	104	85 - 115	2004-03-02
Nitrobenzene		μg/L	500	574	115	85 - 115	2004-03-02
TNT		μg/L	500	443	89	85 - 115	2004-03-02
4-amino-DNT / 2-amino-DNT		μg/L	500	479	96	85 - 115	2004-03-02
2,6-DNT / 2,4-DNT		μg/L	500	506	101	85 - 115	2004-03-02
2-NT		μg/L	500	466	93	85 - 115	2004-03-02
4-NT		μg/L	500	436	87	85 - 115	2004-03-02
3-NT		μg/L	500	491	98	85 - 115	2004-03-02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.50	μg/L	1	2.50	100	85 - 115

Standard (ICV-1) QC Batch: 7933

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		μg/L	500	526	105	85 - 115	2004-03-02
RDX		μg/L	500	560	112	85 - 115	2004-03-02
1,3,5-Trinitrobenzene		μg/L	500	443	89	85 - 115	2004-03-02
1,3-Dinitrobenzene		μg/L	500	470	94	85 - 115	2004-03-02
Tetryl		μg/L	500	544	109	85 - 115	2004-03-02
Nitrobenzene		μg/L	500	559	112	85 - 115	2004-03-02
TNT		μg/L	500	479	96	85 - 115	2004-03-02
4-amino-DNT / 2-amino-DNT		μg/L	500	498	100	85 - 115	2004-03-02
2,6-DNT / 2,4-DNT		μg/L	500	513	103	85 - 115	2004-03-02
2-NT		μg/L	500	492	98	85 - 115	2004-03-02
4-NT		μg/L	500	465	93	85 - 115	2004-03-02
3-NT		μg/L	500	508	102	85 - 115	2004-03-02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.40	μg/L	1	2.50	96	85 - 115

Standard (CCV-1) QC Batch: 7933

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	511	102	85 - 115	2004-03-02
RDX		µg/L	500	550	110	85 - 115	2004-03-02
1,3,5-Trinitrobenzene		µg/L	500	461	92	85 - 115	2004-03-02
1,3-Dinitrobenzene		µg/L	500	469	94	85 - 115	2004-03-02
Tetryl		µg/L	500	519	104	85 - 115	2004-03-02
Nitrobenzene		µg/L	500	574	115	85 - 115	2004-03-02
TNT		µg/L	500	443	89	85 - 115	2004-03-02
4-amino-DNT / 2-amino-DNT		µg/L	500	479	96	85 - 115	2004-03-02
2,6-DNT / 2,4-DNT		µg/L	500	506	101	85 - 115	2004-03-02
2-NT		µg/L	500	466	93	85 - 115	2004-03-02
4-NT		µg/L	500	436	87	85 - 115	2004-03-02
3-NT		µg/L	500	491	98	85 - 115	2004-03-02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.50	µg/L	1	2.50	100	85 - 115

Standard (ICV-1) QC Batch: 7934

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	532	106	85 - 115	2004-03-02
RDX		µg/L	500	561	112	85 - 115	2004-03-02
1,3,5-Trinitrobenzene		µg/L	500	460	92	85 - 115	2004-03-02
1,3-Dinitrobenzene		µg/L	500	489	98	85 - 115	2004-03-02
Tetryl		µg/L	500	565	113	85 - 115	2004-03-02
Nitrobenzene		µg/L	500	574	115	85 - 115	2004-03-02
TNT		µg/L	500	428	86	85 - 115	2004-03-02
4-amino-DNT / 2-amino-DNT		µg/L	500	488	98	85 - 115	2004-03-02
2,6-DNT / 2,4-DNT		µg/L	500	521	104	85 - 115	2004-03-02
2-NT		µg/L	500	504	101	85 - 115	2004-03-02
4-NT		µg/L	500	497	99	85 - 115	2004-03-02
3-NT		µg/L	500	571	114	85 - 115	2004-03-02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.60	µg/L	1	2.50	104	85 - 115

Standard (CCV-1) QC Batch: 7934

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	507	101	85 - 115	2004-03-02
RDX		µg/L	500	568	114	85 - 115	2004-03-02
1,3,5-Trinitrobenzene		µg/L	500	451	90	85 - 115	2004-03-02
1,3-Dinitrobenzene		µg/L	500	484	97	85 - 115	2004-03-02
Tetryl		µg/L	500	563	113	85 - 115	2004-03-02
Nitrobenzene		µg/L	500	563	113	85 - 115	2004-03-02

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TNT		μg/L	500	433	87	85 - 115	2004-03-02
4-amino-DNT / 2-amino-DNT		μg/L	500	490	98	85 - 115	2004-03-02
2,6-DNT / 2,4-DNT		μg/L	500	541	108	85 - 115	2004-03-02
2-NT		μg/L	500	520	104	85 - 115	2004-03-02
4-NT		μg/L	500	485	97	85 - 115	2004-03-02
3-NT		μg/L	500	555	111	85 - 115	2004-03-02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.61	μg/L	1	2.50	104	85 - 115

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7638	Date Analyzed:	2004-02-18	Analyzed By:	BC
Prep Batch:	6834	Date Prepared:	2004-02-17	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7638	Date Analyzed:	2004-02-18	Analyzed By:	BC
Prep Batch:	6834	Date Prepared:	2004-02-17	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7901	Date Analyzed:	2004-02-27	Analyzed By:	BC
Prep Batch:	7057	Date Prepared:	2004-02-27	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7901	Date Analyzed:	2004-02-27	Analyzed By:	BC
Prep Batch:	7057	Date Prepared:	2004-02-27	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7901	Date Analyzed:	2004-02-27	Analyzed By:	BC
Prep Batch:	7057	Date Prepared:	2004-02-27	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7901	Date Analyzed:	2004-02-27	Analyzed By:	BC
Prep Batch:	7057	Date Prepared:	2004-02-27	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7901	Date Analyzed:	2004-02-27	Analyzed By:	BC
Prep Batch:	7057	Date Prepared:	2004-02-27	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7901	Date Analyzed:	2004-02-27	Analyzed By:	BC
Prep Batch:	7057	Date Prepared:	2004-02-27	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7901	Date Analyzed:	2004-02-27	Analyzed By:	BC
Prep Batch:	7057	Date Prepared:	2004-02-27	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7901	Date Analyzed:	2004-02-27	Analyzed By:	BC

Prep Batch: 7057 Date Prepared: 2004-02-27 Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/A
QC Batch: 7901 Date Analyzed: 2004-02-27 Analyzed By: BC
Prep Batch: 7057 Date Prepared: 2004-02-27 Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Method Blank (1) QC Batch: 7638

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Method Blank (1) QC Batch: 7901

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Laboratory Control Spike (LCS-1) QC Batch: 7638

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00101	0.00101	mg/L	1	0.00100	<0.0000360	101	0	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7901

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00109	0.00109	mg/L	1	0.00100	<0.0000329	109	0	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7638

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00106	0.00108	mg/L	1	0.00100	<0.0000360	106	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7901

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00110	0.00105	mg/L	1	0.00100	<0.0000329	110	5	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7638

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00101	101	80 - 120	2004-02-18

Standard (CCV-1) QC Batch: 7638

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.000950	95	80 - 120	2004-02-18

Standard (ICV-1) QC Batch: 7901

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00107	107	80 - 120	2004-02-27

Standard (CCV-1) QC Batch: 7901

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00100	100	80 - 120	2004-02-27

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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 11 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7562	Date Analyzed:	2004-02-10	Analyzed By:	JR
Prep Batch:	6771	Date Prepared:	2004-02-10	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		489	mg/L	50	2.00
Fluoride		3.95	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		22.2	mg/L	10	0.100
Sulfate		3860	mg/L	100	1.00

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7562	Date Analyzed:	2004-02-10	Analyzed By:	JR
Prep Batch:	6771	Date Prepared:	2004-02-10	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		500	mg/L	50	2.00
Fluoride		3.92	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		22.0	mg/L	10	0.100
Sulfate		3970	mg/L	100	1.00

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7931	Date Analyzed:	2004-02-19	Analyzed By:	JR
Prep Batch:	7085	Date Prepared:	2004-02-19	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		367	mg/L	50	2.00
Fluoride		3.72	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		12.9	mg/L	5	0.100
Sulfate		3340	mg/L	100	1.00

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7931	Date Analyzed:	2004-02-19	Analyzed By:	JR

Prep Batch: 7085 Date Prepared: 2004-02-19 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		1.05	mg/L	1	0.200
Chloride		1200	mg/L	100	2.00
Fluoride		3.36	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		47.9	mg/L	50	0.100
Sulfate		6520	mg/L	500	1.00

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7959	Date Analyzed:	2004-02-19	Analyzed By:	JR
Prep Batch:	7108	Date Prepared:	2004-02-19	Prepared By:	JR
QC Batch:	8116	Date Analyzed:	2004-03-04	Analyzed By:	JR
Prep Batch:	7244	Date Prepared:	2004-03-04	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		1.63	mg/L	1	0.200
Chloride		2300	mg/L	500	2.00
Fluoride		3.23	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		80.5	mg/L	50	0.100
Sulfate		7480	mg/L	100	1.00

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7959	Date Analyzed:	2004-02-19	Analyzed By:	JR
Prep Batch:	7108	Date Prepared:	2004-02-19	Prepared By:	JR
QC Batch:	8116	Date Analyzed:	2004-03-04	Analyzed By:	JR
Prep Batch:	7244	Date Prepared:	2004-03-04	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.940	mg/L	1	0.200
Chloride		982	mg/L	100	2.00
Fluoride		5.15	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		12.7	mg/L	5	0.100
Sulfate		5140	mg/L	500	1.00

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7959	Date Analyzed:	2004-02-19	Analyzed By:	JR
Prep Batch:	7108	Date Prepared:	2004-02-19	Prepared By:	JR
QC Batch:	8116	Date Analyzed:	2004-03-04	Analyzed By:	JR

Prep Batch: 7244 Date Prepared: 2004-03-04 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.700	mg/L	1	0.200
Chloride		476	mg/L	100	2.00
Fluoride		3.35	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		13.6	mg/L	5	0.100
Sulfate		4680	mg/L	500	1.00

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis: Ion Chromatography Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 7961 Date Analyzed: 2004-02-21 Analyzed By: JR
Prep Batch: 7109 Date Prepared: 2004-02-21 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		1.64	mg/L	1	0.200
Chloride		2240	mg/L	100	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		74.0	mg/L	50	0.100
Sulfate		8990	mg/L	500	1.00

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis: Ion Chromatography Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 7961 Date Analyzed: 2004-02-21 Analyzed By: JR
Prep Batch: 7109 Date Prepared: 2004-02-21 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		4.42	mg/L	5	0.200
Chloride		6640	mg/L	500	2.00
Fluoride		4.32	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		173	mg/L	50	0.100
Sulfate		12800	mg/L	1000	1.00

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis: Ion Chromatography Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 7961 Date Analyzed: 2004-02-21 Analyzed By: JR
Prep Batch: 7109 Date Prepared: 2004-02-21 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		2.01	mg/L	1	0.200

continued . . .

sample 27961 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3250	mg/L	500	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		97.0	mg/L	50	0.100
Sulfate		9600	mg/L	1000	1.00

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7961	Date Analyzed:	2004-02-21	Analyzed By:	JR
Prep Batch:	7109	Date Prepared:	2004-02-21	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		1.64	mg/L	1	0.200
Chloride		2190	mg/L	100	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		73.8	mg/L	50	0.100
Sulfate		9350	mg/L	500	1.00

Method Blank (1) QC Batch: 7562

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 7931

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 7959

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1

Method Blank (1) QC Batch: 7961

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 8116

Parameter	Flag	Result	Units	RL
Chloride		<2.00	mg/L	2
Sulfate		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 7562

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.36	2.32	mg/L	1	2.50	<0.0800	94	2	88 - 106	4
Chloride	11.6	11.6	mg/L	1	12.5	<0.310	93	0	79 - 112	3
Fluoride	2.33	2.34	mg/L	1	2.50	<0.0400	93	0	82 - 109	2
Nitrite-N	2.37	2.37	mg/L	1	2.50	<0.0100	95	0	83 - 113	2
Nitrate-N	2.38	2.37	mg/L	1	2.50	<0.0100	95	0	86 - 111	1.4
Sulfate	12.3	12.1	mg/L	1	12.5	<0.160	98	2	89 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7931

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.38	2.39	mg/L	1	2.50	<0.0800	95	0	88 - 106	4
Chloride	11.4	11.4	mg/L	1	12.5	<0.310	91	0	79 - 112	3

continued . . .

control spikes continued ...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	2.33	2.34	mg/L	1	2.50	<0.0400	93	0	82 - 109	2
Nitrite-N	2.34	2.36	mg/L	1	2.50	<0.0100	94	1	83 - 113	2
Nitrate-N	2.38	2.38	mg/L	1	2.50	<0.0100	95	0	86 - 111	1.4
Sulfate	11.9	11.8	mg/L	1	12.5	<0.160	95	1	89 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7959

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.35	2.38	mg/L	1	2.50	<0.0800	94	1	88 - 106	4
Fluoride	2.34	2.38	mg/L	1	2.50	<0.0400	94	2	82 - 109	2
Nitrite-N	2.36	2.40	mg/L	1	2.50	<0.0100	94	2	83 - 113	2
Nitrate-N	2.37	2.39	mg/L	1	2.50	<0.0100	95	1	86 - 111	1.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7961

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.46	2.43	mg/L	1	2.50	<0.0800	98	1	88 - 106	4
Chloride	11.9	11.8	mg/L	1	12.5	<0.310	95	0	79 - 112	3
Fluoride	2.44	2.44	mg/L	1	2.50	<0.0400	98	0	82 - 109	2
Nitrite-N	2.46	2.43	mg/L	1	2.50	<0.0100	98	1	83 - 113	2
Nitrate-N	2.42	2.42	mg/L	1	2.50	<0.0100	97	0	86 - 111	1.4
Sulfate	12.3	12.4	mg/L	1	12.5	<0.160	98	1	89 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8116

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	11.8	11.8	mg/L	1	12.5	<0.310	94	0	79 - 112	3
Sulfate	12.2	12.2	mg/L	1	12.5	<0.160	98	0	89 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7562

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	118	120	mg/L	50	2.50	<4.00	94	2	84 - 121	3
Chloride	1090	1080	mg/L	50	12.5	500	94	1	79 - 111	3
Fluoride	124	123	mg/L	50	2.50	<2.00	99	1	93 - 104	2
Nitrite-N	120	120	mg/L	50	2.50	<0.500	96	0	85 - 111	2
Nitrate-N	140	141	mg/L	50	2.50	30.8	87	1	77 - 119	2

continued ...

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Sulfate	[1]	4800	4670	mg/L	50	12.5	4300	80	3	80 - 110	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7931

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide		120	119	mg/L	50	2.50	<4.00	96	1	84 - 121	3
Chloride		928	929	mg/L	50	12.5	367	90	0	79 - 111	3
Fluoride		119	119	mg/L	50	2.50	<2.00	95	0	93 - 104	2
Nitrite-N		117	118	mg/L	50	2.50	<0.500	94	1	85 - 111	2
Nitrate-N		130	130	mg/L	50	2.50	23	86	0	77 - 119	2
Sulfate	[2][3]	4070	4060	mg/L	50	12.5	3700	59	0	80 - 110	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7959

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide		120	119	mg/L	50	2.50	<4.00	96	1	84 - 121	3
Fluoride		120	119	mg/L	50	2.50	<2.00	96	1	93 - 104	2
Nitrite-N		118	118	mg/L	50	2.50	<0.500	94	0	85 - 111	2
Nitrate-N		192	192	mg/L	50	2.50	80.5	89	0	77 - 119	2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7961

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide		1240	1250	mg/L	500	2.50	<40.0	99	1	84 - 121	3
Chloride		8390	8230	mg/L	500	12.5	2360	96	2	79 - 111	3
Fluoride		1240	1230	mg/L	500	2.50	<20.0	99	1	93 - 104	2
Nitrite-N		1270	1240	mg/L	500	2.50	<5.00	102	2	85 - 111	2
Nitrate-N		1280	1290	mg/L	500	2.50	179	88	1	77 - 119	2
Sulfate	[4][5]	17300	15500	mg/L	500	12.5	9350	127	11	80 - 110	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8116

[1]Matrix interferences reduced the recovery of sulfate in the matrix spike duplicate. The analysis is still valid since the LCS and LCSD sulfate results are in control.

[2]Matrix interferences occurred during the elution of sulfate. The LCS and LCSD results for sulfate were in control and used to validate the run.

[3]Matrix interferences occurred during the elution of sulfate. The LCS and LCSD results for sulfate were in control and used to validate the run.

[4]The matrix spike result was not within control limits due to a distortion in the curve for sulfate. The matrix spike duplicate provided better results and a curve. The LCS and LCSD were used to approve the validity of the analysis for sulfate.

[5]The matrix spike result was not within control limits due to a distortion in the curve for sulfate. The matrix spike duplicate provided better results and a curve. The LCS and LCSD were used to approve the validity of the analysis for sulfate.

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	6860	6790	mg/L	500	12.5	1270	89	1	79 - 111	3
Sulfate	9850	9670	mg/L	500	12.5	3830	96	2	80 - 110	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7562

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.38	95	90 - 110	2004-02-10
Chloride		mg/L	12.5	11.6	93	90 - 110	2004-02-10
Fluoride		mg/L	2.50	2.35	94	90 - 110	2004-02-10
Nitrite-N		mg/L	2.50	2.37	95	90 - 110	2004-02-10
Nitrate-N		mg/L	2.50	2.26	90	90 - 110	2004-02-10
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-02-10

Standard (CCV-1) QC Batch: 7562

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.36	94	90 - 110	2004-02-10
Chloride		mg/L	12.5	11.7	94	85 - 115	2004-02-10
Fluoride		mg/L	2.50	2.37	95	85 - 115	2004-02-10
Nitrite-N		mg/L	2.50	2.39	96	85 - 115	2004-02-10
Nitrate-N		mg/L	2.50	2.28	91	85 - 115	2004-02-10
Sulfate		mg/L	12.5	11.7	94	85 - 115	2004-02-10

Standard (ICV-1) QC Batch: 7931

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.32	93	90 - 110	2004-02-19
Chloride		mg/L	12.5	11.3	90	90 - 110	2004-02-19
Fluoride		mg/L	2.50	2.33	93	90 - 110	2004-02-19
Nitrite-N		mg/L	2.50	2.33	93	90 - 110	2004-02-19
Nitrate-N		mg/L	2.50	2.24	90	90 - 110	2004-02-19
Sulfate		mg/L	12.5	11.3	90	90 - 110	2004-02-19

Standard (CCV-1) QC Batch: 7931

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.31	92	90 - 110	2004-02-19
Chloride		mg/L	12.5	11.3	90	85 - 115	2004-02-19
Fluoride		mg/L	2.50	2.33	93	85 - 115	2004-02-19
Nitrite-N		mg/L	2.50	2.32	93	85 - 115	2004-02-19

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.27	91	85 - 115	2004-02-19
Sulfate		mg/L	12.5	11.3	90	85 - 115	2004-02-19

Standard (ICV-1) QC Batch: 7959

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.34	94	90 - 110	2004-02-19
Fluoride		mg/L	2.50	2.34	94	90 - 110	2004-02-19
Nitrite-N		mg/L	2.50	2.33	93	90 - 110	2004-02-19
Nitrate-N		mg/L	2.50	2.25	90	90 - 110	2004-02-19

Standard (CCV-1) QC Batch: 7959

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.36	94	90 - 110	2004-02-19
Fluoride		mg/L	2.50	2.36	94	85 - 115	2004-02-19
Nitrite-N		mg/L	2.50	2.36	94	85 - 115	2004-02-19
Nitrate-N		mg/L	2.50	2.26	90	85 - 115	2004-02-19

Standard (ICV-1) QC Batch: 7961

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.43	97	90 - 110	2004-02-21
Chloride		mg/L	12.5	11.6	93	90 - 110	2004-02-21
Fluoride		mg/L	2.50	2.40	96	90 - 110	2004-02-21
Nitrite-N		mg/L	2.50	2.40	96	90 - 110	2004-02-21
Nitrate-N		mg/L	2.50	2.29	92	90 - 110	2004-02-21
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-02-21

Standard (CCV-1) QC Batch: 7961

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.42	97	90 - 110	2004-02-21
Chloride		mg/L	12.5	11.8	94	85 - 115	2004-02-21
Fluoride		mg/L	2.50	2.44	98	85 - 115	2004-02-21
Nitrite-N		mg/L	2.50	2.42	97	85 - 115	2004-02-21
Nitrate-N		mg/L	2.50	2.31	92	85 - 115	2004-02-21
Sulfate		mg/L	12.5	11.8	94	85 - 115	2004-02-21

Standard (ICV-1) QC Batch: 8116

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.6	93	90 - 110	2004-03-04
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-03-04

Standard (CCV-1) QC Batch: 8116

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.8	94	85 - 115	2004-03-04
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-03-04

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7540	Date Analyzed:	2004-02-10	Analyzed By:	MK
Prep Batch:	6746	Date Prepared:	2004-02-10	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.60	s.u.	1	0.00

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7540	Date Analyzed:	2004-02-10	Analyzed By:	MK
Prep Batch:	6746	Date Prepared:	2004-02-10	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.60	s.u.	1	0.00

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7773	Date Analyzed:	2004-02-18	Analyzed By:	MK
Prep Batch:	6948	Date Prepared:	2004-02-18	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.50	s.u.	1	0.00

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7773	Date Analyzed:	2004-02-18	Analyzed By:	MK
Prep Batch:	6948	Date Prepared:	2004-02-18	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.60	s.u.	1	0.00

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7774	Date Analyzed:	2004-02-19	Analyzed By:	MK
Prep Batch:	6949	Date Prepared:	2004-02-19	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.60	s.u.	1	0.00

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7774	Date Analyzed:	2004-02-19	Analyzed By:	MK
Prep Batch:	6949	Date Prepared:	2004-02-19	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.30	s.u.	1	0.00

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7774	Date Analyzed:	2004-02-19	Analyzed By:	MK
Prep Batch:	6949	Date Prepared:	2004-02-19	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.50	s.u.	1	0.00

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7775	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6950	Date Prepared:	2004-02-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.60	s.u.	1	0.00

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7775	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6950	Date Prepared:	2004-02-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.60	s.u.	1	0.00

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7775	Date Analyzed:	2004-02-20	Analyzed By:	JG

Prep Batch: 6950 Date Prepared: 2004-02-20 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.50	s.u.	1	0.00

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis: pH Analytical Method: SM 4500-H+ Prep Method: N/A
QC Batch: 7775 Date Analyzed: 2004-02-20 Analyzed By: JG
Prep Batch: 6950 Date Prepared: 2004-02-20 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.60	s.u.	1	0.00

Duplicate (1) QC Batch: 7540

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.60	7.60	s.u.	1	0	

Duplicate (1) QC Batch: 7773

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.60	7.60	s.u.	1	0	

Duplicate (1) QC Batch: 7774

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.50	7.50	s.u.	1	0	

Duplicate (1) QC Batch: 7775

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.60	7.60	s.u.	1	0	

Standard (ICV-1) QC Batch: 7540

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-10

Standard (CCV-1) QC Batch: 7540

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-10

Standard (ICV-1) QC Batch: 7773

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-18

Standard (CCV-1) QC Batch: 7773

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-18

Standard (ICV-1) QC Batch: 7774

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-19

Standard (CCV-1) QC Batch: 7774

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-19

Standard (ICV-1) QC Batch: 7775

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-20

Standard (CCV-1) QC Batch: 7775

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-20

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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 36 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7612	Date Analyzed:	2004-02-18	Analyzed By:	RC
Prep Batch:	6749	Date Prepared:	2004-02-13	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27118 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		0.00938	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0222	mg/L	0.001	80.0	28	0 - 94
Phenol-d5		0.0130	mg/L	0.001	80.0	16	0 - 67
Nitrobenzene-d5		0.0491	mg/L	0.001	80.0	61	6.75 - 138.7
2-Fluorobiphenyl		0.0494	mg/L	0.001	80.0	62	14.7 - 135
2,4,6-Tribromophenol		0.0626	mg/L	0.001	80.0	78	44.92 - 152
Terphenyl-d14		0.0498	mg/L	0.001	80.0	62	44.49 - 162.36

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7612	Date Analyzed:	2004-02-18	Analyzed By:	RC
Prep Batch:	6749	Date Prepared:	2004-02-13	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27120 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27120 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0188	mg/L	0.001	80.0	24	0 - 94
Phenol-d5		0.0102	mg/L	0.001	80.0	13	0 - 67
Nitrobenzene-d5		0.0482	mg/L	0.001	80.0	60	6.75 - 138.7
2-Fluorobiphenyl		0.0502	mg/L	0.001	80.0	63	14.7 - 135
2,4,6-Tribromophenol		0.0522	mg/L	0.001	80.0	65	44.92 - 152
Terphenyl-d14		0.0550	mg/L	0.001	80.0	69	44.49 - 162.36

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7847	Date Analyzed:	2004-02-25	Analyzed By:	RC
Prep Batch:	6871	Date Prepared:	2004-02-20	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27614 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0

continued . . .

sample 27614 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0185	mg/L	0.001	80.0	23	0 - 94
Phenol-d5		0.00984	mg/L	0.001	80.0	12	0 - 67
Nitrobenzene-d5		0.0417	mg/L	0.001	80.0	52	6.75 - 138.7
2-Fluorobiphenyl		0.0422	mg/L	0.001	80.0	53	14.7 - 135
2,4,6-Tribromophenol		0.0418	mg/L	0.001	80.0	52	44.92 - 152
Terphenyl-d14		0.0462	mg/L	0.001	80.0	58	44.49 - 162.36

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7847	Date Analyzed:	2004-02-25	Analyzed By:	RC
Prep Batch:	6871	Date Prepared:	2004-02-20	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27616 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27616 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0175	mg/L	0.001	80.0	22	0 - 94
Phenol-d5		0.00939	mg/L	0.001	80.0	12	0 - 67
Nitrobenzene-d5		0.0424	mg/L	0.001	80.0	53	6.75 - 138.7
2-Fluorobiphenyl		0.0419	mg/L	0.001	80.0	52	14.7 - 135
2,4,6-Tribromophenol		0.0433	mg/L	0.001	80.0	54	44.92 - 152
Terphenyl-d14		0.0483	mg/L	0.001	80.0	60	44.49 - 162.36

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7847	Date Analyzed:	2004-02-25	Analyzed By:	RC
Prep Batch:	6871	Date Prepared:	2004-02-20	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27721 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27721 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0196	mg/L	0.001	80.0	24	0 - 94
Phenol-d5		0.0121	mg/L	0.001	80.0	15	0 - 67
Nitrobenzene-d5		0.0455	mg/L	0.001	80.0	57	6.75 - 138.7
2-Fluorobiphenyl		0.0455	mg/L	0.001	80.0	57	14.7 - 135
2,4,6-Tribromophenol		0.0470	mg/L	0.001	80.0	59	44.92 - 152
Terphenyl-d14		0.0434	mg/L	0.001	80.0	54	44.49 - 162.36

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7847	Date Analyzed:	2004-02-25	Analyzed By:	RC
Prep Batch:	6871	Date Prepared:	2004-02-20	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27723 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0199	mg/L	0.001	80.0	25	0 - 94
Phenol-d5		0.0102	mg/L	0.001	80.0	13	0 - 67
Nitrobenzene-d5		0.0466	mg/L	0.001	80.0	58	6.75 - 138.7
2-Fluorobiphenyl		0.0477	mg/L	0.001	80.0	60	14.7 - 135

continued . . .

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,6-Tribromophenol		0.0566	mg/L	0.001	80.0	71	44.92 - 152
Terphenyl-d14		0.0545	mg/L	0.001	80.0	68	44.49 - 162.36

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7847	Date Analyzed:	2004-02-25	Analyzed By:	RC
Prep Batch:	6871	Date Prepared:	2004-02-20	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27725 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27725 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0207	mg/L	0.001	80.0	26	0 - 94
Phenol-d5		0.0114	mg/L	0.001	80.0	14	0 - 67
Nitrobenzene-d5		0.0491	mg/L	0.001	80.0	61	6.75 - 138.7
2-Fluorobiphenyl		0.0498	mg/L	0.001	80.0	62	14.7 - 135
2,4,6-Tribromophenol		0.0511	mg/L	0.001	80.0	64	44.92 - 152
Terphenyl-d14		0.0489	mg/L	0.001	80.0	61	44.49 - 162.36

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7885	Date Analyzed:	2004-02-27	Analyzed By:	RC
Prep Batch:	7013	Date Prepared:	2004-02-26	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		0.0186	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0

continued . . .

sample 27957 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27957 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0134	mg/L	0.001	80.0	17	0 - 94
Phenol-d5		0.00993	mg/L	0.001	80.0	12	0 - 67
Nitrobenzene-d5		0.0346	mg/L	0.001	80.0	43	6.75 - 138.7
2-Fluorobiphenyl		0.0354	mg/L	0.001	80.0	44	14.7 - 135
2,4,6-Tribromophenol		0.0399	mg/L	0.001	80.0	50	44.92 - 152
Terphenyl-d14		0.0485	mg/L	0.001	80.0	61	44.49 - 162.36

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7885	Date Analyzed:	2004-02-27	Analyzed By:	RC
Prep Batch:	7013	Date Prepared:	2004-02-26	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		0.00909	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27959 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27959 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0142	mg/L	0.001	80.0	18	0 - 94
Phenol-d5		0.00931	mg/L	0.001	80.0	12	0 - 67
Nitrobenzene-d5		0.0302	mg/L	0.001	80.0	38	6.75 - 138.7
2-Fluorobiphenyl		0.0313	mg/L	0.001	80.0	39	14.7 - 135
2,4,6-Tribromophenol	[1]	0.0315	mg/L	0.001	80.0	39	44.92 - 152
Terphenyl-d14	[2]	0.0308	mg/L	0.001	80.0	38	44.49 - 162.36

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7885	Date Analyzed:	2004-02-27	Analyzed By:	RC
Prep Batch:	7013	Date Prepared:	2004-02-26	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00

continued . . .

[1]Sample surrogate recovery out of limits due to sample matrix.
[2]Sample surrogate recovery out of limits due to sample matrix.

sample 27961 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		0.00571	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		1.00	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		0.168	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27961 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0144	mg/L	0.001	80.0	18	0 - 94
Phenol-d5		0.00920	mg/L	0.001	80.0	12	0 - 67
Nitrobenzene-d5		0.0343	mg/L	0.001	80.0	43	6.75 - 138.7
2-Fluorobiphenyl		0.0346	mg/L	0.001	80.0	43	14.7 - 135
2,4,6-Tribromophenol		0.0374	mg/L	0.001	80.0	47	44.92 - 152
Terphenyl-d14		0.0498	mg/L	0.001	80.0	62	44.49 - 162.36

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7885	Date Analyzed:	2004-02-27	Analyzed By:	RC
Prep Batch:	7013	Date Prepared:	2004-02-26	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		0.00673	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 27963 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0115	mg/L	0.001	80.0	14	0 - 94
Phenol-d5		0.00691	mg/L	0.001	80.0	9	0 - 67
Nitrobenzene-d5		0.0322	mg/L	0.001	80.0	40	6.75 - 138.7
2-Fluorobiphenyl		0.0325	mg/L	0.001	80.0	41	14.7 - 135

continued . . .

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,6-Tribromophenol		0.0381	mg/L	0.001	80.0	48	44.92 - 152
Terphenyl-d14		0.0488	mg/L	0.001	80.0	61	44.49 - 162.36

Method Blank (1) QC Batch: 7612

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0211	mg/L	0.001	80.0	26	0 - 94.7
Phenol-d5		0.0155	mg/L	0.001	80.0	19	0 - 67.64
Nitrobenzene-d5		0.0399	mg/L	0.001	80.0	50	6.75 - 138.7
2-Fluorobiphenyl		0.0419	mg/L	0.001	80.0	52	14.71 - 134.97
2,4,6-Tribromophenol	[3]	0.0351	mg/L	0.001	80.0	44	44.92 - 152.29
Terphenyl-d14		0.0469	mg/L	0.001	80.0	59	44.49 - 162.36

Method Blank (1) QC Batch: 7847

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5

continued . . .

[3]Surrogate recovery out of limits due to prep error during the acidic extraction.

method blank continued . . .

Parameter	Flag	Result	Units	RL
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0302	mg/L	0.001	80.0	38	0 - 94.7
Phenol-d5		0.0199	mg/L	0.001	80.0	25	0 - 67.64
Nitrobenzene-d5		0.0442	mg/L	0.001	80.0	55	6.75 - 138.7
2-Fluorobiphenyl		0.0435	mg/L	0.001	80.0	54	14.71 - 134.97
2,4,6-Tribromophenol		0.0462	mg/L	0.001	80.0	58	44.92 - 152.29
Terphenyl-d14		0.0479	mg/L	0.001	80.0	60	44.49 - 162.36

Method Blank (1) QC Batch: 7885

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0214	mg/L	0.001	80.0	27	0 - 94.7
Phenol-d5		0.0185	mg/L	0.001	80.0	23	0 - 67.64
Nitrobenzene-d5		0.0375	mg/L	0.001	80.0	47	6.75 - 138.7
2-Fluorobiphenyl		0.0377	mg/L	0.001	80.0	47	14.71 - 134.97
2,4,6-Tribromophenol	[4]	0.0331	mg/L	0.001	80.0	41	44.92 - 152.29
Terphenyl-d14		0.0498	mg/L	0.001	80.0	62	44.49 - 162.36

Laboratory Control Spike (LCS-1) QC Batch: 7612

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol		16.7	15.4	mg/L	1	80.0	<0.490	21	8	2.5 - 70.1	20
2-Chlorophenol		20.0	29.8	mg/L	1	80.0	<1.63	25	39	1.2 - 146.7	20
1,4-Dichlorobenzene (para)		45.4	45.0	mg/L	1	80.0	<1.93	57	1	26.7 - 125.6	20
n-Nitrosodi-n-propylamine		51.3	50.7	mg/L	1	80.0	<2.26	64	1	17.1 - 165.6	20
1,2,4-Trichlorobenzene		50.7	50.5	mg/L	1	80.0	<1.52	63	0	32.4 - 123.3	20
4-Chloro-3-methylphenol		41.5	42.0	mg/L	1	80.0	<1.60	52	1	12.7 - 130.6	20
Acenaphthene		57.1	56.7	mg/L	1	80.0	<1.58	71	1	39.6 - 138.4	20
4-Nitrophenol	[5]	<3.83	4.05	mg/L	1	80.0	<3.83	0	200	0.2 - 72	20
2,4-Dinitrotoluene		71.3	71.6	mg/L	1	80.0	<2.09	89	0	22.8 - 173.4	20
Pentachlorophenol	[6]	<3.04	3.27	mg/L	1	80.0	<3.04	0	200	0.9 - 133.5	20
Pyrene		80.2	80.6	mg/L	1	80.0	<1.81	100	0	42.9 - 144	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	7.02	13.1	mg/L	1	80.0	9	16	0 - 99.8
Phenol-d5	13.3	12.0	mg/L	1	80.0	17	15	0 - 77
Nitrobenzene-d5	35.9	36.6	mg/L	1	80.0	45	46	0 - 147.8
2-Fluorobiphenyl	38.9	38.8	mg/L	1	80.0	49	48	13.6 - 148.1
2,4,6-Tribromophenol	19.3	20.9	mg/L	1	80.0	24	26	2.2 - 140.2
Terphenyl-d14	60.0	59.9	mg/L	1	80.0	75	75	3.5 - 168.8

Laboratory Control Spike (LCS-1) QC Batch: 7847

[4]The average of the surrogate compounds shows that the process is in control.
[5]Other analytes show extraction occurred properly.
[6]Other analytes show extraction occurred properly.

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	29.9	30.0	mg/L	1	80.0	<0.490	37	0	2.5 - 70.1	20
2-Chlorophenol	57.9	58.8	mg/L	1	80.0	<1.63	72	2	1.2 - 146.7	20
1,4-Dichlorobenzene (para)	55.7	55.7	mg/L	1	80.0	<1.93	70	0	26.7 - 125.6	20
n-Nitrosodi-n-propylamine	62.9	63.0	mg/L	1	80.0	<2.26	79	0	17.1 - 165.6	20
1,2,4-Trichlorobenzene	61.2	61.2	mg/L	1	80.0	<1.52	76	0	32.4 - 123.3	20
4-Chloro-3-methylphenol	73.2	73.2	mg/L	1	80.0	<1.60	92	0	12.7 - 130.6	20
Acenaphthene	69.5	69.2	mg/L	1	80.0	<1.58	87	0	39.6 - 138.4	20
4-Nitrophenol	31.7	31.6	mg/L	1	80.0	<3.83	40	0	0.2 - 72	20
2,4-Dinitrotoluene	80.7	80.8	mg/L	1	80.0	<2.09	101	0	22.8 - 173.4	20
Pentachlorophenol	86.6	86.9	mg/L	1	80.0	<3.04	108	0	0.9 - 133.5	20
Pyrene	101	102	mg/L	1	80.0	<1.81	126	1	42.9 - 144	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	25.4	25.4	mg/L	1	80.0	32	32	0 - 99.8
Phenol-d5	18.2	18.2	mg/L	1	80.0	23	23	0 - 77
Nitrobenzene-d5	40.9	40.1	mg/L	1	80.0	51	50	0 - 147.8
2-Fluorobiphenyl	42.3	42.2	mg/L	1	80.0	53	53	13.6 - 148.1
2,4,6-Tribromophenol	51.9	51.4	mg/L	1	80.0	65	64	2.2 - 140.2
Terphenyl-d14	54.0	54.8	mg/L	1	80.0	68	68	3.5 - 168.8

Laboratory Control Spike (LCS-1) QC Batch: 7885

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	38.3	37.8	mg/L	1	80.0	<0.490	48	1	2.5 - 70.1	20
Phenol	38.3	37.8	mg/L	1	80.0	<0.490	48	1	2.5 - 70.1	20
2-Chlorophenol	58.6	59.0	mg/L	1	80.0	<1.63	73	1	1.2 - 146.7	20
2-Chlorophenol	58.6	59.0	mg/L	1	80.0	<1.63	73	1	1.2 - 146.7	20
1,4-Dichlorobenzene (para)	54.3	53.9	mg/L	1	80.0	<1.93	68	1	26.7 - 125.6	20
1,4-Dichlorobenzene (para)	54.3	53.9	mg/L	1	80.0	<1.93	68	1	26.7 - 125.6	20
n-Nitrosodi-n-propylamine	68.3	68.3	mg/L	1	80.0	<2.26	85	0	17.1 - 165.6	20
n-Nitrosodi-n-propylamine	68.3	68.3	mg/L	1	80.0	<2.26	85	0	17.1 - 165.6	20
1,2,4-Trichlorobenzene	61.8	61.1	mg/L	1	80.0	<1.52	77	1	32.4 - 123.3	20
1,2,4-Trichlorobenzene	61.8	61.1	mg/L	1	80.0	<1.52	77	1	32.4 - 123.3	20
4-Chloro-3-methylphenol	72.4	73.3	mg/L	1	80.0	<1.60	90	1	12.7 - 130.6	20
4-Chloro-3-methylphenol	72.4	73.3	mg/L	1	80.0	<1.60	90	1	12.7 - 130.6	20
Acenaphthene	69.0	69.3	mg/L	1	80.0	<1.58	86	0	39.6 - 138.4	20
Acenaphthene	69.0	69.3	mg/L	1	80.0	<1.58	86	0	39.6 - 138.4	20
4-Nitrophenol	52.6	53.0	mg/L	1	80.0	<3.83	66	1	0.2 - 72	20
4-Nitrophenol	52.6	53.0	mg/L	1	80.0	<3.83	66	1	0.2 - 72	20
2,4-Dinitrotoluene	73.3	73.1	mg/L	1	80.0	<2.09	92	0	22.8 - 173.4	20
2,4-Dinitrotoluene	73.3	73.1	mg/L	1	80.0	<2.09	92	0	22.8 - 173.4	20
Pentachlorophenol	56.7	56.7	mg/L	1	80.0	<3.04	71	0	0.9 - 133.5	20
Pentachlorophenol	56.7	56.7	mg/L	1	80.0	<3.04	71	0	0.9 - 133.5	20
Pyrene	77.3	76.8	mg/L	1	80.0	<1.81	97	1	42.9 - 144	20
Pyrene	77.3	76.8	mg/L	1	80.0	<1.81	97	1	42.9 - 144	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	32.6	32.8	mg/L	1	80.0	41	41	0 - 99.8
2-Fluorophenol	32.6	32.8	mg/L	1	80.0	41	41	0 - 99.8
Phenol-d5	30.0	29.7	mg/L	1	80.0	38	37	0 - 77
Phenol-d5	30.0	29.7	mg/L	1	80.0	38	37	0 - 77
Nitrobenzene-d5	45.8	45.9	mg/L	1	80.0	57	57	0 - 147.8
Nitrobenzene-d5	45.8	45.9	mg/L	1	80.0	57	57	0 - 147.8
2-Fluorobiphenyl	48.3	48.3	mg/L	1	80.0	60	60	13.6 - 148.1
2-Fluorobiphenyl	48.3	48.3	mg/L	1	80.0	60	60	13.6 - 148.1
2,4,6-Tribromophenol	52.5	52.7	mg/L	1	80.0	66	66	2.2 - 140.2
2,4,6-Tribromophenol	52.5	52.7	mg/L	1	80.0	66	66	2.2 - 140.2
Terphenyl-d14	57.6	57.2	mg/L	1	80.0	72	72	3.5 - 168.8
Terphenyl-d14	57.6	57.2	mg/L	1	80.0	72	72	3.5 - 168.8

Matrix Spike (MS-1) QC Batch: 7885

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	11.7	11.5	mg/L	1	80.0	<0.490	15	2	0 - 59.4	
Phenol	11.7	11.5	mg/L	1	80.0	<0.490	15	2	0 - 59.4	
2-Chlorophenol	40.9	40.5	mg/L	1	80.0	<1.63	51	1	33.87 - 76.65	
2-Chlorophenol	40.9	40.5	mg/L	1	80.0	<1.63	51	1	33.87 - 76.65	
1,4-Dichlorobenzene (para)	41.1	40.7	mg/L	1	80.0	<1.93	51	1	5.66 - 106.63	
1,4-Dichlorobenzene (para)	41.1	40.7	mg/L	1	80.0	<1.93	51	1	5.66 - 106.63	
n-Nitrosodi-n-propylamine	51.8	51.5	mg/L	1	80.0	<2.26	65	0	2.12 - 116.53	
n-Nitrosodi-n-propylamine	51.8	51.5	mg/L	1	80.0	<2.26	65	0	2.12 - 116.53	
1,2,4-Trichlorobenzene	45.0	45.0	mg/L	1	80.0	<1.52	56	0	8.26 - 101.73	
1,2,4-Trichlorobenzene	45.0	45.0	mg/L	1	80.0	<1.52	56	0	8.26 - 101.73	
4-Chloro-3-methylphenol	52.1	50.9	mg/L	1	80.0	<1.60	65	2	49.08 - 66.06	
4-Chloro-3-methylphenol	52.1	50.9	mg/L	1	80.0	<1.60	65	2	49.08 - 66.06	
Acenaphthene	51.2	51.4	mg/L	1	80.0	<1.58	64	0	10.76 - 107.89	
Acenaphthene	51.2	51.4	mg/L	1	80.0	<1.58	64	0	10.76 - 107.89	
4-Nitrophenol	18.5	18.1	mg/L	1	80.0	<3.83	23	2	0 - 70.4	
4-Nitrophenol	18.5	18.1	mg/L	1	80.0	<3.83	23	2	0 - 70.4	
2,4-Dinitrotoluene	59.0	59.2	mg/L	1	80.0	<2.09	74	0	0 - 140	
2,4-Dinitrotoluene	59.0	59.2	mg/L	1	80.0	<2.09	74	0	0 - 140	
Pentachlorophenol	45.8	47.0	mg/L	1	80.0	<3.04	57	2	0 - 121	
Pentachlorophenol	45.8	47.0	mg/L	1	80.0	<3.04	57	2	0 - 121	
Pyrene	73.4	73.5	mg/L	1	80.0	<1.81	92	0	13.81 - 106.27	
Pyrene	73.4	73.5	mg/L	1	80.0	<1.81	92	0	13.81 - 106.27	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol	13.1	12.8	mg/L	1	80	16	16	7.07 - 72.13
2-Fluorophenol	13.1	12.8	mg/L	1	80	16	16	7.07 - 72.13
Phenol-d5	8.82	8.95	mg/L	1	80	11	11	0 - 67.01
Phenol-d5	8.82	8.95	mg/L	1	80	11	11	0 - 67.01
Nitrobenzene-d5	34.4	33.9	mg/L	1	80	43	42	32.4 - 110.8
Nitrobenzene-d5	34.4	33.9	mg/L	1	80	43	42	32.4 - 110.8

continued . . .

matrix spikes continued . . .

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorobiphenyl	[7][8]	36.0	36.0	mg/L	1	80	45	45	46.84 - 91.48
2-Fluorobiphenyl	[9][10]	36.0	36.0	mg/L	1	80	45	45	46.84 - 91.48
2,4,6-Tribromophenol		39.3	39.4	mg/L	1	80	49	49	29.39 - 110.7
2,4,6-Tribromophenol		39.3	39.4	mg/L	1	80	49	49	29.39 - 110.7
Terphenyl-d14		53.2	53.0	mg/L	1	80	66	66	34.1 - 95.34
Terphenyl-d14		53.2	53.0	mg/L	1	80	66	66	34.1 - 95.34

Standard (CCV-1) QC Batch: 7612

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	60.0	100	80 - 120	2004-02-18
1,4-Dichlorobenzene (para)		mg/L	60.0	60.9	102	80 - 120	2004-02-18
2-Nitrophenol		mg/L	60.0	66.7	111	80 - 120	2004-02-18
2,4-Dichlorophenol		mg/L	60.0	69.8	116	80 - 120	2004-02-18
Hexachlorobutadiene		mg/L	60.0	65.4	109	80 - 120	2004-02-18
4-Chloro-3-methylphenol		mg/L	60.0	63.4	106	80 - 120	2004-02-18
2,4,6-Trichlorophenol		mg/L	60.0	67.9	113	80 - 120	2004-02-18
Acenaphthene		mg/L	60.0	64.6	108	80 - 120	2004-02-18
Diphenylamine		mg/L	60.0	64.8	108	80 - 120	2004-02-18
Pentachlorophenol		mg/L	60.0	66.2	110	80 - 120	2004-02-18
Fluoranthene		mg/L	60.0	66.5	111	80 - 120	2004-02-18
Di-n-octylphthalate		mg/L	60.0	67.2	112	80 - 120	2004-02-18
Benzo(a)pyrene		mg/L	60.0	65.4	109	80 - 120	2004-02-18

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		65.3	mg/L	1	60.0	109	80 - 120
Phenol-d5		62.3	mg/L	1	60.0	104	80 - 120
Nitrobenzene-d5		63.0	mg/L	1	60.0	105	80 - 120
2-Fluorobiphenyl		66.0	mg/L	1	60.0	110	80 - 120
2,4,6-Tribromophenol		67.4	mg/L	1	60.0	112	80 - 120
Terphenyl-d14		66.8	mg/L	1	60.0	111	80 - 120

Standard (CCV-1) QC Batch: 7847

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	62.5	104	80 - 120	2004-02-25
1,4-Dichlorobenzene (para)		mg/L	60.0	60.9	102	80 - 120	2004-02-25
2-Nitrophenol		mg/L	60.0	66.9	112	80 - 120	2004-02-25
2,4-Dichlorophenol		mg/L	60.0	68.4	114	80 - 120	2004-02-25
Hexachlorobutadiene		mg/L	60.0	64.8	108	80 - 120	2004-02-25
4-Chloro-3-methylphenol		mg/L	60.0	66.8	111	80 - 120	2004-02-25

continued . . .

[7]The average of the matrix spike surrogate recoveries shows that the process is in control.
[8]The average of the matrix spike surrogate recoveries shows that the process is in control.
[9]The average of the matrix spike surrogate recoveries shows that the process is in control.
[10]The average of the matrix spike surrogate recoveries shows that the process is in control.

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
2,4,6-Trichlorophenol		mg/L	60.0	67.1	112	80 - 120	2004-02-25
Acenaphthene		mg/L	60.0	64.7	108	80 - 120	2004-02-25
Diphenylamine		mg/L	60.0	65.3	109	80 - 120	2004-02-25
Pentachlorophenol		mg/L	60.0	60.4	101	80 - 120	2004-02-25
Fluoranthene		mg/L	60.0	65.9	110	80 - 120	2004-02-25
Di-n-octylphthalate		mg/L	60.0	66.2	110	80 - 120	2004-02-25
Benzo(a)pyrene		mg/L	60.0	65.2	109	80 - 120	2004-02-25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		65.8	mg/L	1	60.0	110	80 - 120
Phenol-d5		65.1	mg/L	1	60.0	108	80 - 120
Nitrobenzene-d5		64.0	mg/L	1	60.0	107	80 - 120
2-Fluorobiphenyl		65.1	mg/L	1	60.0	108	80 - 120
2,4,6-Tribromophenol		66.2	mg/L	1	60.0	110	80 - 120
Terphenyl-d14		67.4	mg/L	1	60.0	112	80 - 120

Standard (CCV-1) QC Batch: 7885

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	63.7	106	80 - 120	2004-02-27
1,4-Dichlorobenzene (para)		mg/L	60.0	61.9	103	80 - 120	2004-02-27
2-Nitrophenol		mg/L	60.0	67.5	112	80 - 120	2004-02-27
2,4-Dichlorophenol		mg/L	60.0	67.6	113	80 - 120	2004-02-27
Hexachlorobutadiene		mg/L	60.0	64.1	107	80 - 120	2004-02-27
4-Chloro-3-methylphenol		mg/L	60.0	68.8	115	80 - 120	2004-02-27
2,4,6-Trichlorophenol		mg/L	60.0	67.0	112	80 - 120	2004-02-27
Acenaphthene		mg/L	60.0	65.0	108	80 - 120	2004-02-27
Diphenylamine		mg/L	60.0	66.5	111	80 - 120	2004-02-27
Pentachlorophenol		mg/L	60.0	57.5	96	80 - 120	2004-02-27
Fluoranthene		mg/L	60.0	65.3	109	80 - 120	2004-02-27
Di-n-octylphthalate		mg/L	60.0	66.8	111	80 - 120	2004-02-27
Benzo(a)pyrene		mg/L	60.0	65.4	109	80 - 120	2004-02-27

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		67.1	mg/L	1	60.0	112	80 - 120
Phenol-d5		67.2	mg/L	1	60.0	112	80 - 120
Nitrobenzene-d5		62.7	mg/L	1	60.0	104	80 - 120
2-Fluorobiphenyl		64.3	mg/L	1	60.0	107	80 - 120
2,4,6-Tribromophenol		67.7	mg/L	1	60.0	113	80 - 120
Terphenyl-d14		69.3	mg/L	1	60.0	116	80 - 120

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7909	Date Analyzed:	2004-02-27	Analyzed By:	JR
Prep Batch:	7062	Date Prepared:	2004-02-27	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids	[1]	6910	mg/L	1	5.00

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7909	Date Analyzed:	2004-02-27	Analyzed By:	JR
Prep Batch:	7062	Date Prepared:	2004-02-27	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids	[2]	6900	mg/L	1	5.00

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7911	Date Analyzed:	2004-02-23	Analyzed By:	JG
Prep Batch:	7065	Date Prepared:	2004-02-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		5720	mg/L	1	5.00

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7911	Date Analyzed:	2004-02-23	Analyzed By:	JG
Prep Batch:	7065	Date Prepared:	2004-02-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		11800	mg/L	1	5.00

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7911	Date Analyzed:	2004-02-23	Analyzed By:	JG
Prep Batch:	7065	Date Prepared:	2004-02-23	Prepared By:	JG

[1]Sample ran out of hold time.
[2]Sample ran out of hold time.

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		15800	mg/L	1	5.00

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7911	Date Analyzed:	2004-02-23	Analyzed By:	JG
Prep Batch:	7065	Date Prepared:	2004-02-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		9100	mg/L	1	5.00

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7911	Date Analyzed:	2004-02-23	Analyzed By:	JG
Prep Batch:	7065	Date Prepared:	2004-02-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		7500	mg/L	1	5.00

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7911	Date Analyzed:	2004-02-23	Analyzed By:	JG
Prep Batch:	7065	Date Prepared:	2004-02-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		17800	mg/L	1	5.00

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7911	Date Analyzed:	2004-02-23	Analyzed By:	JG
Prep Batch:	7065	Date Prepared:	2004-02-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		32900	mg/L	1	5.00

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7911	Date Analyzed:	2004-02-23	Analyzed By:	JG

Prep Batch: 7065 Date Prepared: 2004-02-23 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		20600	mg/L	1	5.00

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A
QC Batch: 7911 Date Analyzed: 2004-02-23 Analyzed By: JG
Prep Batch: 7065 Date Prepared: 2004-02-23 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		17800	mg/L	1	5.00

Method Blank (1) QC Batch: 7909

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Method Blank (1) QC Batch: 7911

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Duplicate (1) QC Batch: 7909

Param		Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	[3]	122	132	mg/L	1	8	11

Duplicate (1) QC Batch: 7911

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	17800	17800	mg/L	1	0	11

Standard (ICV-1) QC Batch: 7909

[3]Sample ran out of hold time.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1030	103	92 - 107	2004-02-27

Standard (CCV-1) QC Batch: 7909

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1020	102	92 - 107	2004-02-27

Standard (ICV-1) QC Batch: 7911

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1000	100	92 - 107	2004-02-23

Standard (CCV-1) QC Batch: 7911

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	978	98	92 - 107	2004-02-23

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7690	Date Analyzed:	2004-02-20	Analyzed By:	MW
Prep Batch:	6876	Date Prepared:	2004-02-19	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7690	Date Analyzed:	2004-02-20	Analyzed By:	MW
Prep Batch:	6876	Date Prepared:	2004-02-19	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7690	Date Analyzed:	2004-02-20	Analyzed By:	MW
Prep Batch:	6876	Date Prepared:	2004-02-19	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7690	Date Analyzed:	2004-02-20	Analyzed By:	MW
Prep Batch:	6876	Date Prepared:	2004-02-19	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7780	Date Analyzed:	2004-02-25	Analyzed By:	MW
Prep Batch:	6955	Date Prepared:	2004-02-25	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7780	Date Analyzed:	2004-02-25	Analyzed By:	MW
Prep Batch:	6955	Date Prepared:	2004-02-25	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7780	Date Analyzed:	2004-02-25	Analyzed By:	MW
Prep Batch:	6955	Date Prepared:	2004-02-25	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7780	Date Analyzed:	2004-02-25	Analyzed By:	MW
Prep Batch:	6955	Date Prepared:	2004-02-25	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7780	Date Analyzed:	2004-02-25	Analyzed By:	MW
Prep Batch:	6955	Date Prepared:	2004-02-25	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7780	Date Analyzed:	2004-02-25	Analyzed By:	MW

Prep Batch: 6955 Date Prepared: 2004-02-25 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7780	Date Analyzed:	2004-02-25	Analyzed By:	MW
Prep Batch:	6955	Date Prepared:	2004-02-25	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Method Blank (1) QC Batch: 7690

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	4

Method Blank (1) QC Batch: 7780

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	4

Laboratory Control Spike (LCS-1) QC Batch: 7690

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	39.8	38.1	mg/L	1	50.0	<5.05	80	4	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7780

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	44.8	40.0	mg/L	1	50.0	<5.05	90	11	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7690

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	38.4	35.6	mg/L	1	50.0	<5.05	77	8	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7780

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	22.1	24.6	mg/L	1	50.0	<5.05	44	11	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7690

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.65	93	85 - 115	2004-02-20

Standard (CCV-1) QC Batch: 7690

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.93	99	85 - 115	2004-02-20

Standard (ICV-1) QC Batch: 7780

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.70	94	85 - 115	2004-02-25

Standard (CCV-1) QC Batch: 7780

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.82	96	85 - 115	2004-02-25

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7518	Date Analyzed:	2004-02-10	Analyzed By:	RC
Prep Batch:	6700	Date Prepared:	2004-02-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		1.45	mg/L	1	1.00

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7518	Date Analyzed:	2004-02-10	Analyzed By:	RC
Prep Batch:	6700	Date Prepared:	2004-02-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		1.82	mg/L	1	1.00

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7832	Date Analyzed:	2004-02-24	Analyzed By:	RC
Prep Batch:	7004	Date Prepared:	2004-02-24	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		1.25	mg/L	1	1.00

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7832	Date Analyzed:	2004-02-24	Analyzed By:	RC
Prep Batch:	7004	Date Prepared:	2004-02-24	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		1.87	mg/L	1	1.00

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7832	Date Analyzed:	2004-02-24	Analyzed By:	RC
Prep Batch:	7004	Date Prepared:	2004-02-24	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		2.43	mg/L	1	1.00

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7832	Date Analyzed:	2004-02-24	Analyzed By:	RC
Prep Batch:	7004	Date Prepared:	2004-02-24	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		7.78	mg/L	1	1.00

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7832	Date Analyzed:	2004-02-24	Analyzed By:	RC
Prep Batch:	7004	Date Prepared:	2004-02-24	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		1.99	mg/L	1	1.00

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7832	Date Analyzed:	2004-02-24	Analyzed By:	RC
Prep Batch:	7004	Date Prepared:	2004-02-24	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		2.84	mg/L	1	1.00

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7832	Date Analyzed:	2004-02-24	Analyzed By:	RC
Prep Batch:	7004	Date Prepared:	2004-02-24	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		4.38	mg/L	1	1.00

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7979	Date Analyzed:	2004-03-03	Analyzed By:	RC

Prep Batch: 7123 Date Prepared: 2004-03-03 Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		3.34	mg/L	1	1.00

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis: TOC Analytical Method: E 415.1 Prep Method: N/A
QC Batch: 7979 Date Analyzed: 2004-03-03 Analyzed By: RC
Prep Batch: 7123 Date Prepared: 2004-03-03 Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		2.68	mg/L	1	1.00

Method Blank (1) QC Batch: 7518

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Method Blank (1) QC Batch: 7832

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Method Blank (1) QC Batch: 7979

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 7518

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	5.70	5.44	mg/L	1	5.00	<0.843	114	5	78 - 120	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7832

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	4.95	4.79	mg/L	1	5.00	<0.843	99	3	78 - 120	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7979

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	5.38	5.62	mg/L	1	5.00	<0.382	108	4	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7518

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	6.82	6.88	mg/L	1	5.00	1.82	100	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7832

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon [1,2]	10.2	10.6	mg/L	1	5.00	4.38	116	4	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7979

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon [3,4]	148	146	mg/L	1	5.00	200	1040	1	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7518

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.40	108	85 - 115	2004-02-10

Standard (CCV-1) QC Batch: 7518

[1]Matrix spike recovery out of limits due to sample matrix.
[2]Matrix spike recovery out of limits due to sample matrix.
[3]Matrix spike result out of limits due to sample matrix. LCS/LCSD show that the process is in control.
[4]Matrix spike result out of limits due to sample matrix. LCS/LCSD show that the process is in control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.99	100	85 - 115	2004-02-10

Standard (ICV-1) QC Batch: 7832

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.63	113	85 - 115	2004-02-24

Standard (CCV-1) QC Batch: 7832

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.98	100	85 - 115	2004-02-24

Standard (ICV-1) QC Batch: 7979

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.54	111	85 - 115	2004-03-03

Standard (CCV-1) QC Batch: 7979

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.34	107	85 - 115	2004-03-03

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7510	Date Analyzed:	2004-02-11	Analyzed By:	MW
Prep Batch:	6722	Date Prepared:	2004-02-11	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7510	Date Analyzed:	2004-02-11	Analyzed By:	MW
Prep Batch:	6722	Date Prepared:	2004-02-11	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7747	Date Analyzed:	2004-02-23	Analyzed By:	MW
Prep Batch:	6928	Date Prepared:	2004-02-23	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7747	Date Analyzed:	2004-02-23	Analyzed By:	MW
Prep Batch:	6928	Date Prepared:	2004-02-23	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7747	Date Analyzed:	2004-02-23	Analyzed By:	MW
Prep Batch:	6928	Date Prepared:	2004-02-23	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7747	Date Analyzed:	2004-02-23	Analyzed By:	MW
Prep Batch:	6928	Date Prepared:	2004-02-23	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7747	Date Analyzed:	2004-02-23	Analyzed By:	MW
Prep Batch:	6928	Date Prepared:	2004-02-23	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7897	Date Analyzed:	2004-03-01	Analyzed By:	MW
Prep Batch:	7052	Date Prepared:	2004-03-01	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7897	Date Analyzed:	2004-03-01	Analyzed By:	MW
Prep Batch:	7052	Date Prepared:	2004-03-01	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7897	Date Analyzed:	2004-03-01	Analyzed By:	MW

Prep Batch: 7052 Date Prepared: 2004-03-01 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis: Total Cyanide Analytical Method: SM 4500-CN C,E Prep Method: N/A
QC Batch: 7897 Date Analyzed: 2004-03-01 Analyzed By: MW
Prep Batch: 7052 Date Prepared: 2004-03-01 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Method Blank (1) QC Batch: 7510

Parameter	Flag	Result	Units	RL
Total Cyanide		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 7747

Parameter	Flag	Result	Units	RL
Total Cyanide		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 7897

Parameter	Flag	Result	Units	RL
Total Cyanide		<0.0100	mg/L	0.01

Laboratory Control Spike (LCS-1) QC Batch: 7510

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cyanide	0.0976	0.0997	mg/L	1	0.120	<0.00402	81	2	77.3 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7747

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cyanide	0.104	0.102	mg/L	1	0.120	<0.00402	87	2	77.3 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7897

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cyanide	0.104	0.0981	mg/L	1	0.120	<0.00402	87	6	77.3 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7510

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cyanide	0.112	0.105	mg/L	1	0.120	<0.00402	93	6	0 - 167	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7747

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cyanide	0.111	0.105	mg/L	1	0.120	<0.00402	92	6	0 - 167	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7897

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cyanide	0.102	0.106	mg/L	1	0.120	<0.00402	85	4	0 - 167	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7510

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.120	0.122	102	85 - 115	2004-02-11

Standard (CCV-1) QC Batch: 7510

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.120	0.123	102	85 - 115	2004-02-11

Standard (ICV-1) QC Batch: 7747

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.120	0.126	105	85 - 115	2004-02-23

Standard (CCV-1) QC Batch: 7747

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.120	0.130	108	85 - 115	2004-02-23

Standard (ICV-1) QC Batch: 7897

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.120	0.120	100	85 - 115	2004-03-01

Standard (CCV-1) QC Batch: 7897

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.120	0.119	99	85 - 115	2004-03-01

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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 20 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7611	Date Analyzed:	2004-02-17	Analyzed By:	RR
Prep Batch:	6748	Date Prepared:	2004-02-13	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.144	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		2.89	mg/L	1	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		0.121	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.168	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		25.0	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		6.47	mg/L	10	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7611	Date Analyzed:	2004-02-17	Analyzed By:	RR
Prep Batch:	6748	Date Prepared:	2004-02-13	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		2.94	mg/L	1	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		<0.0500	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250

continued . . .

sample 27120 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Molybdenum		0.170	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		24.0	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		6.46	mg/L	10	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7821	Date Analyzed:	2004-02-26	Analyzed By:	RR
Prep Batch:	6884	Date Prepared:	2004-02-20	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.808	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		2.83	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		0.772	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.139	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		27.7	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		9.35	mg/L	10	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7821	Date Analyzed:	2004-02-26	Analyzed By:	RR
Prep Batch:	6884	Date Prepared:	2004-02-20	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		5.37	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		0.177	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.473	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.191	mg/L	1	0.0500
Total Silica		31.5	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		5.51	mg/L	10	0.00500
Total Vanadium		0.0380	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7858	Date Analyzed:	2004-02-27	Analyzed By:	RR
Prep Batch:	6924	Date Prepared:	2004-02-23	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		3.90	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		4.42	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		0.150	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		2.18	mg/L	1	0.0500
Total Manganese		0.0320	mg/L	1	0.0250
Total Molybdenum		0.331	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		0.0850	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		31.5	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		7.03	mg/L	10	0.00500

continued . . .

sample 27721 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7858	Date Analyzed:	2004-02-27	Analyzed By:	RR
Prep Batch:	6924	Date Prepared:	2004-02-23	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		6.48	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		0.191	mg/L	1	0.0500
Total Manganese		0.231	mg/L	1	0.0250
Total Molybdenum		0.214	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		16.3	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		9.42	mg/L	10	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7858	Date Analyzed:	2004-02-27	Analyzed By:	RR
Prep Batch:	6924	Date Prepared:	2004-02-23	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		1.86	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		4.67	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250

continued . . .

sample 27725 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		1.14	mg/L	1	0.0500
Total Manganese		0.0260	mg/L	1	0.0250
Total Molybdenum		0.242	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		29.5	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		5.15	mg/L	10	0.00500
Total Vanadium		0.0260	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7873	Date Analyzed:	2004-03-01	Analyzed By:	RR
Prep Batch:	6979	Date Prepared:	2004-02-25	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		5.86	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.0100	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		0.284	mg/L	1	0.0100
Total Copper		0.0340	mg/L	1	0.0125
Total Iron		0.0560	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.929	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		0.120	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.238	mg/L	1	0.0500
Total Silica		32.5	mg/L	1	0.0500
Total Tin		0.204	mg/L	1	0.0250
Total Strontium		6.00	mg/L	10	0.00500
Total Vanadium		0.0540	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7873	Date Analyzed:	2004-03-01	Analyzed By:	RR
Prep Batch:	6979	Date Prepared:	2004-02-25	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		2.39	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		6.00	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.0100	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		0.0410	mg/L	1	0.0125
Total Iron		1.26	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		1.35	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		0.174	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.539	mg/L	1	0.0500
Total Silica		20.7	mg/L	10	0.0500
Total Tin		0.119	mg/L	1	0.0250
Total Strontium		8.42	mg/L	10	0.00500
Total Vanadium		0.0320	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7873	Date Analyzed:	2004-03-01	Analyzed By:	RR
Prep Batch:	6979	Date Prepared:	2004-02-25	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		2.07	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		3.05	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.00900	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		1.37	mg/L	1	0.0100
Total Copper		0.0330	mg/L	1	0.0125
Total Iron		1.61	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.412	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		0.0900	mg/L	1	0.0500

continued . . .

sample 27961 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.369	mg/L	1	0.0500
Total Silica		36.5	mg/L	10	0.0500
Total Tin		0.160	mg/L	1	0.0250
Total Strontium		7.95	mg/L	10	0.00500
Total Vanadium		0.0440	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7873	Date Analyzed:	2004-03-01	Analyzed By:	RR
Prep Batch:	6979	Date Prepared:	2004-02-25	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.102	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		5.88	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.0120	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		0.292	mg/L	1	0.0100
Total Copper		0.0370	mg/L	1	0.0125
Total Iron		<0.0500	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.957	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		0.167	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.317	mg/L	1	0.0500
Total Silica		30.6	mg/L	10	0.0500
Total Tin		0.200	mg/L	1	0.0250
Total Strontium		5.90	mg/L	10	0.00500
Total Vanadium		0.0580	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Method Blank (1) QC Batch: 7611

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		<0.00500	mg/L	0.005

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Total Barium		<0.100	mg/L	0.1
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00500	mg/L	0.005
Total Cobalt		<0.0200	mg/L	0.02
Total Chromium		<0.0100	mg/L	0.01
Total Copper		<0.0125	mg/L	0.0125
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0250	mg/L	0.025
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0500	mg/L	0.05
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.00500	mg/L	0.005
Total Vanadium		<0.0250	mg/L	0.025
Total Zinc		<0.0250	mg/L	0.025

Method Blank (1) QC Batch: 7821

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.100	mg/L	0.1
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00500	mg/L	0.005
Total Cobalt		<0.0200	mg/L	0.02
Total Chromium		<0.0100	mg/L	0.01
Total Copper		<0.0125	mg/L	0.0125
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0250	mg/L	0.025
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0500	mg/L	0.05
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.00500	mg/L	0.005
Total Vanadium		<0.0250	mg/L	0.025
Total Zinc		<0.0250	mg/L	0.025

Method Blank (1) QC Batch: 7858

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.100	mg/L	0.1
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00500	mg/L	0.005
Total Cobalt		<0.0200	mg/L	0.02
Total Chromium		<0.0100	mg/L	0.01
Total Copper		<0.0125	mg/L	0.0125
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0250	mg/L	0.025
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0500	mg/L	0.05
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.00500	mg/L	0.005
Total Vanadium		<0.0250	mg/L	0.025
Total Zinc		<0.0250	mg/L	0.025

Method Blank (1) QC Batch: 7873

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.100	mg/L	0.1
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00500	mg/L	0.005
Total Cobalt		<0.0200	mg/L	0.02
Total Chromium		<0.0100	mg/L	0.01
Total Copper		<0.0125	mg/L	0.0125
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0250	mg/L	0.025
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0500	mg/L	0.05
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.00500	mg/L	0.005
Total Vanadium		<0.0250	mg/L	0.025
Total Zinc		<0.0250	mg/L	0.025

Laboratory Control Spike (LCS-1) QC Batch: 7611

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.127	0.127	mg/L	1	0.125	<0.000199	102	0	85 - 115	20
Total Aluminum		0.945	0.943	mg/L	1	1.00	<0.00984	94	0	85 - 115	20
Total Arsenic		0.475	0.469	mg/L	1	0.500	<0.00860	95	1	85 - 115	20
Total Boron		0.0470	0.0520	mg/L	1	0.0500	<0.00366	94	10	85 - 115	20
Total Barium		0.996	1.00	mg/L	1	1.00	<0.000984	100	0	85 - 115	20
Total Beryllium		0.0230	0.0230	mg/L	1	0.0250	<0.000532	92	0	85 - 115	20
Total Cadmium		0.237	0.237	mg/L	1	0.250	<0.000577	95	0	85 - 115	20
Total Cobalt		0.249	0.246	mg/L	1	0.250	<0.000630	100	1	85 - 115	20
Total Chromium		0.101	0.100	mg/L	1	0.100	<0.000437	101	1	85 - 115	20
Total Copper		0.119	0.120	mg/L	1	0.125	<0.00164	95	1	85 - 115	20
Total Iron		0.489	0.490	mg/L	1	0.500	<0.00281	98	0	85 - 115	20
Total Manganese		0.242	0.243	mg/L	1	0.250	<0.00296	97	0	85 - 115	20
Total Molybdenum		0.515	0.510	mg/L	1	0.500	<0.00118	103	1	85 - 115	20
Total Nickel		0.239	0.238	mg/L	1	0.250	<0.00126	96	0	85 - 115	20
Total Phosphorous		0.428	0.482	mg/L	1	0.500	<0.00459	86	12	85 - 115	20
Total Lead		0.496	0.495	mg/L	1	0.500	<0.00310	99	0	85 - 115	20
Total Selenium		0.426	0.423	mg/L	1	0.500	<0.00370	85	1	85 - 115	20
Total Silica	[1][2]	1.04	1.01	mg/L	1	1.00	<0.00632	104	3	85 - 115	20
Total Tin	[3][4]	0.296	0.297	mg/L	1	0.300	<0.00238	99	0	85 - 115	20
Total Strontium		0.0490	0.0490	mg/L	1	0.0500	<0.000457	98	0	85 - 115	20
Total Vanadium		0.251	0.252	mg/L	1	0.250	<0.000371	100	0	85 - 115	20
Total Zinc		0.252	0.250	mg/L	1	0.250	<0.00151	101	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7821

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.129	0.130	mg/L	1	0.125	<0.000199	103	1	85 - 115	20
Total Aluminum	0.979	0.991	mg/L	1	1.00	<0.00984	98	1	85 - 115	20
Total Arsenic	0.476	0.485	mg/L	1	0.500	<0.00860	95	2	85 - 115	20
Total Boron	0.0470	0.0490	mg/L	1	0.0500	<0.00366	94	4	85 - 115	20
Total Barium	1.02	1.03	mg/L	1	1.00	<0.000984	102	1	85 - 115	20
Total Beryllium	0.0250	0.0250	mg/L	1	0.0250	<0.000532	100	0	85 - 115	20
Total Cadmium	0.244	0.246	mg/L	1	0.250	<0.000577	98	1	85 - 115	20
Total Cobalt	0.254	0.256	mg/L	1	0.250	<0.000630	102	1	85 - 115	20
Total Chromium	0.105	0.106	mg/L	1	0.100	<0.000437	105	1	85 - 115	20
Total Copper	0.127	0.128	mg/L	1	0.125	<0.00164	102	1	85 - 115	20
Total Iron	0.568	0.526	mg/L	1	0.500	<0.00281	114	8	85 - 115	20
Total Manganese	0.251	0.252	mg/L	1	0.250	<0.00296	100	0	85 - 115	20
Total Molybdenum	0.522	0.526	mg/L	1	0.500	<0.00118	104	1	85 - 115	20
Total Nickel	0.246	0.248	mg/L	1	0.250	<0.00126	98	1	85 - 115	20
Total Phosphorous	0.503	0.506	mg/L	1	0.500	<0.00459	101	0	85 - 115	20
Total Lead	0.505	0.510	mg/L	1	0.500	<0.00310	101	1	85 - 115	20
Total Selenium	0.434	0.430	mg/L	1	0.500	<0.00370	87	1	85 - 115	20

continued ...

[1]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[2]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[3]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[4]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.

control spikes continued ...

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silica	[5][6]	1.07	1.08	mg/L	1	1.00	<0.00632	107	1	85 - 115	20
Total Tin	[7][8]	0.305	0.306	mg/L	1	0.300	<0.00238	102	0	85 - 115	20
Total Strontium		0.0500	0.0510	mg/L	1	0.0500	<0.000457	100	2	85 - 115	20
Total Vanadium		0.258	0.260	mg/L	1	0.250	<0.000371	103	1	85 - 115	20
Total Zinc		0.243	0.251	mg/L	1	0.250	<0.00151	97	3	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7858

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.129	0.129	mg/L	1	0.125	<0.000199	103	0	85 - 115	20
Total Aluminum		0.972	0.969	mg/L	1	1.00	<0.00984	97	0	85 - 115	20
Total Arsenic		0.477	0.481	mg/L	1	0.500	<0.00860	95	1	85 - 115	20
Total Boron		0.0840	0.0845	mg/L	1	0.0500	0.041	86	0	85 - 115	20
Total Barium		1.02	1.02	mg/L	1	1.00	<0.000984	102	0	85 - 115	20
Total Beryllium		0.0243	0.0240	mg/L	1	0.0250	<0.000532	97	1	85 - 115	20
Total Cadmium		0.242	0.241	mg/L	1	0.250	<0.000577	97	0	85 - 115	20
Total Cobalt		0.251	0.251	mg/L	1	0.250	<0.000630	100	0	85 - 115	20
Total Chromium		0.105	0.105	mg/L	1	0.100	<0.000437	105	0	85 - 115	20
Total Copper		0.126	0.126	mg/L	1	0.125	<0.00164	101	0	85 - 115	20
Total Iron		0.501	0.499	mg/L	1	0.500	<0.00281	100	0	85 - 115	20
Total Manganese		0.249	0.249	mg/L	1	0.250	<0.00296	100	0	85 - 115	20
Total Molybdenum		0.519	0.521	mg/L	1	0.500	<0.00118	104	0	85 - 115	20
Total Nickel		0.244	0.244	mg/L	1	0.250	<0.00126	98	0	85 - 115	20
Total Phosphorous		0.505	0.497	mg/L	1	0.500	<0.00459	101	2	85 - 115	20
Total Lead		0.501	0.503	mg/L	1	0.500	<0.00310	100	0	85 - 115	20
Total Selenium		0.432	0.432	mg/L	1	0.500	<0.00370	86	0	85 - 115	20
Total Silica	[9][10]	1.08	1.10	mg/L	1	1.00	0.066	101	2	85 - 115	20
Total Tin	[11][12]	0.304	0.305	mg/L	1	0.300	<0.00238	101	0	85 - 115	20
Total Strontium		0.0510	0.0510	mg/L	1	0.0500	<0.000457	102	0	85 - 115	20
Total Vanadium		0.256	0.255	mg/L	1	0.250	<0.000371	102	0	85 - 115	20
Total Zinc		0.241	0.241	mg/L	1	0.250	<0.00151	96	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7873

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.132	0.132	mg/L	1	0.125	<0.000199	106	0	85 - 115	20
Total Aluminum	1.02	1.01	mg/L	1	1.00	<0.00984	102	1	85 - 115	20

continued ...

[5]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[6]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[7]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[8]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[9]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[10]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[11]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[12]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.

control spikes continued ...

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Arsenic		0.492	0.498	mg/L	1	0.500	<0.00860	98	1	85 - 115	20
Total Boron		0.0470	0.0430	mg/L	1	0.0500	<0.00366	94	9	85 - 115	20
Total Barium		1.05	1.05	mg/L	1	1.00	<0.000984	105	0	85 - 115	20
Total Beryllium		0.0250	0.0250	mg/L	1	0.0250	<0.000532	100	0	85 - 115	20
Total Cadmium		0.249	0.250	mg/L	1	0.250	<0.000577	100	0	85 - 115	20
Total Cobalt		0.259	0.261	mg/L	1	0.250	<0.000630	104	1	85 - 115	20
Total Chromium		0.108	0.108	mg/L	1	0.100	<0.000437	108	0	85 - 115	20
Total Copper		0.132	0.132	mg/L	1	0.125	<0.00164	106	0	85 - 115	20
Total Iron		0.552	0.529	mg/L	1	0.500	<0.00281	110	4	85 - 115	20
Total Manganese		0.257	0.257	mg/L	1	0.250	<0.00296	103	0	85 - 115	20
Total Molybdenum		0.528	0.532	mg/L	1	0.500	<0.00118	106	1	85 - 115	20
Total Nickel		0.252	0.253	mg/L	1	0.250	<0.00126	101	0	85 - 115	20
Total Phosphorous		0.522	0.525	mg/L	1	0.500	<0.00459	104	0	85 - 115	20
Total Lead		0.514	0.516	mg/L	1	0.500	<0.00310	103	0	85 - 115	20
Total Selenium		0.437	0.441	mg/L	1	0.500	<0.00370	87	1	85 - 115	20
Total Silica	[13][14]	1.12	1.09	mg/L	1	1.00	<0.00632	112	3	85 - 115	20
Total Tin	[15][16]	0.310	0.314	mg/L	1	0.300	<0.00238	103	1	85 - 115	20
Total Strontium		0.0490	0.0490	mg/L	1	0.0500	<0.000457	98	0	85 - 115	20
Total Vanadium		0.264	0.264	mg/L	1	0.250	<0.000371	106	0	85 - 115	20
Total Zinc		0.251	0.248	mg/L	1	0.250	<0.00151	100	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7611

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.119	0.119	mg/L	1	0.125	<0.000199	95	0	75 - 125	20
Total Aluminum		1.21	1.22	mg/L	1	1.00	0.209	100	1	75 - 125	20
Total Arsenic		0.415	0.420	mg/L	1	0.500	<0.00860	83	1	75 - 125	20
Total Boron		0.340	0.343	mg/L	1	0.0500	0.293	94	1	75 - 125	20
Total Barium		0.916	0.925	mg/L	1	1.00	<0.000984	92	1	75 - 125	20
Total Beryllium	[17][18]	0.0174	0.0180	mg/L	1	0.0250	<0.000532	70	3	75 - 125	20
Total Cadmium		0.190	0.193	mg/L	1	0.250	<0.000577	76	2	75 - 125	20
Total Cobalt		0.198	0.200	mg/L	1	0.250	<0.000630	79	1	75 - 125	20
Total Chromium		0.0830	0.0830	mg/L	1	0.100	<0.000437	83	0	75 - 125	20
Total Copper		0.110	0.111	mg/L	1	0.125	<0.00164	88	1	75 - 125	20
Total Iron		3.09	3.07	mg/L	1	0.500	2.59	100	1	75 - 125	20
Total Manganese		0.385	0.390	mg/L	1	0.250	0.185	80	1	75 - 125	20
Total Molybdenum		0.529	0.534	mg/L	1	0.500	0.101	86	1	75 - 125	20
Total Nickel		0.192	0.196	mg/L	1	0.250	<0.00126	77	2	75 - 125	20
Total Phosphorous		0.500	0.505	mg/L	1	0.500	0.033	93	1	75 - 125	20
Total Lead		0.391	0.390	mg/L	1	0.500	<0.00310	78	0	75 - 125	20
Total Selenium		0.422	0.423	mg/L	1	0.500	<0.00370	84	0	75 - 125	20
Total Silica		3.51	3.50	mg/L	1	0.500	2.97	108	0	75 - 125	20

continued ...

[13]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[14]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[15]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[16]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[17]MS recovery invalid due to matrix effects.
[18]MS invalid due to matrix effects.

matrix spikes continued ...

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Tin	[19][20]	0.227	0.228	mg/L	1	0.300	<0.00238	76	0	75 - 125	20
Total Strontium		7.21	7.19	mg/L	10	0.0500	6.68	106	0	75 - 125	20
Total Vanadium		0.231	0.233	mg/L	1	0.250	<0.000371	92	1	75 - 125	20
Total Zinc		0.232	0.221	mg/L	1	0.250	<0.00151	93	5	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7821

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.125	0.126	mg/L	1	0.125	<0.000199	100	1	75 - 125	20
Total Aluminum		1.03	1.10	mg/L	1	1.00	<0.00984	103	6	75 - 125	20
Total Arsenic		0.534	0.553	mg/L	1	0.500	<0.00860	107	3	75 - 125	20
Total Boron		0.0400	0.0490	mg/L	1	0.0500	<0.00366	80	20	75 - 125	20
Total Barium		4.35	4.38	mg/L	1	1.00	3.35	100	1	75 - 125	20
Total Beryllium		0.0230	0.0230	mg/L	1	0.0250	<0.000532	92	0	75 - 125	20
Total Cadmium		0.214	0.218	mg/L	1	0.250	<0.000577	86	2	75 - 125	20
Total Cobalt		0.217	0.224	mg/L	1	0.250	<0.000630	87	3	75 - 125	20
Total Chromium		0.0990	0.0990	mg/L	1	0.100	<0.000437	99	0	75 - 125	20
Total Copper		0.127	0.126	mg/L	1	0.125	<0.00164	102	1	75 - 125	20
Total Iron		0.517	0.519	mg/L	1	0.500	<0.00281	103	0	75 - 125	20
Total Manganese		0.236	0.250	mg/L	1	0.250	<0.00296	94	6	75 - 125	20
Total Molybdenum		0.472	0.483	mg/L	1	0.500	<0.00118	94	2	75 - 125	20
Total Nickel		0.214	0.220	mg/L	1	0.250	<0.00126	86	3	75 - 125	20
Total Phosphorous		0.541	0.545	mg/L	1	0.500	<0.00459	108	1	75 - 125	20
Total Lead		0.439	0.439	mg/L	1	0.500	<0.00310	88	0	75 - 125	20
Total Selenium		0.427	0.427	mg/L	1	0.500	<0.00370	85	0	75 - 125	20
Total Silica		0.571	0.513	mg/L	1	0.500	<0.00632	114	11	75 - 125	20
Total Tin	[21][22]	0.273	0.281	mg/L	1	0.300	<0.00238	91	3	75 - 125	20
Total Strontium		0.0480	0.0490	mg/L	1	0.0500	<0.000457	96	2	75 - 125	20
Total Vanadium		0.248	0.256	mg/L	1	0.250	<0.000371	99	3	75 - 125	20
Total Zinc		0.236	0.243	mg/L	1	0.250	<0.00151	94	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7858

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.129	0.128	mg/L	1	0.125	<0.000199	103	1	75 - 125	20
Total Aluminum		1.13	1.12	mg/L	1	1.00	0.02	111	1	75 - 125	20
Total Arsenic		0.470	0.447	mg/L	1	0.500	<0.00860	94	5	75 - 125	20
Total Boron		0.0500	0.0450	mg/L	1	0.0500	<0.00366	100	10	75 - 125	20
Total Barium		1.11	1.10	mg/L	1	1.00	0.169	94	1	75 - 125	20
Total Beryllium		0.0230	0.0230	mg/L	1	0.0250	<0.000532	92	0	75 - 125	20

continued ...

[19]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[20]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[21]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[22]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.

matrix spikes continued ...

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cadmium		0.222	0.219	mg/L	1	0.250	<0.000577	89	1	75 - 125	20
Total Cobalt		0.225	0.222	mg/L	1	0.250	<0.000630	90	1	75 - 125	20
Total Chromium		0.0980	0.0970	mg/L	1	0.100	<0.000437	98	1	75 - 125	20
Total Copper		0.127	0.127	mg/L	1	0.125	<0.00164	102	0	75 - 125	20
Total Iron		0.480	0.476	mg/L	1	0.500	<0.00281	96	1	75 - 125	20
Total Manganese		0.361	0.358	mg/L	1	0.250	0.128	93	1	75 - 125	20
Total Molybdenum		0.509	0.505	mg/L	1	0.500	0.018	98	1	75 - 125	20
Total Nickel		0.219	0.217	mg/L	1	0.250	<0.00126	88	1	75 - 125	20
Total Phosphorous		0.504	0.497	mg/L	1	0.500	<0.00459	101	1	75 - 125	20
Total Lead		0.452	0.449	mg/L	1	0.500	<0.00310	90	1	75 - 125	20
Total Selenium		0.464	0.458	mg/L	1	0.500	<0.00370	93	1	75 - 125	20
Total Silica	[23][24]	1.00	1.05	mg/L	1	1.00	<0.00632	100	5	75 - 125	20
Total Tin	[25][26]	0.291	0.291	mg/L	1	0.300	<0.00238	97	0	75 - 125	20
Total Strontium		0.0500	0.0500	mg/L	1	0.0500	<0.000457	100	0	75 - 125	20
Total Vanadium		0.300	0.297	mg/L	1	0.250	0.052	99	1	75 - 125	20
Total Zinc		0.226	0.224	mg/L	1	0.250	<0.00151	90	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7873

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.131	0.136	mg/L	1	0.125	<0.000199	105	4	75 - 125	20
Total Aluminum		1.21	1.24	mg/L	1	1.00	0.102	111	2	75 - 125	20
Total Arsenic		0.428	0.375	mg/L	1	0.500	<0.00860	86	13	75 - 125	20
Total Boron	[27][28]	6.04	6.32	mg/L	1	0.0500	5.88	320	4	75 - 125	20
Total Barium		1.04	1.01	mg/L	1	1.00	0.01	103	3	75 - 125	20
Total Beryllium		0.0360	0.0350	mg/L	1	0.0250	0.012	96	3	75 - 125	20
Total Cadmium		0.243	0.235	mg/L	1	0.250	<0.000577	97	3	75 - 125	20
Total Cobalt		0.265	0.253	mg/L	1	0.250	<0.000630	106	5	75 - 125	20
Total Chromium		0.403	0.392	mg/L	1	0.100	0.292	111	3	75 - 125	20
Total Copper		0.173	0.167	mg/L	1	0.125	0.037	109	4	75 - 125	20
Total Iron		0.439	0.433	mg/L	1	0.500	0.041	80	1	75 - 125	20
Total Manganese		0.240	0.232	mg/L	1	0.250	<0.00296	96	3	75 - 125	20
Total Molybdenum		1.51	1.46	mg/L	1	0.500	0.957	111	3	75 - 125	20
Total Nickel		0.243	0.235	mg/L	1	0.250	<0.00126	97	3	75 - 125	20
Total Phosphorous		0.736	0.738	mg/L	1	0.500	0.167	114	0	75 - 125	20
Total Lead		0.455	0.455	mg/L	1	0.500	<0.00310	91	0	75 - 125	20
Total Selenium		0.753	0.780	mg/L	1	0.500	0.317	87	4	75 - 125	20
Total Silica	[29][30]	33.5	34.9	mg/L	1	1.00	30.6	290	4	75 - 125	20
Total Tin	[31][32]	0.495	0.500	mg/L	1	0.300	0.2	98	1	75 - 125	20

continued ...

[23]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[24]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[25]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[26]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[27]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[28]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[29]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[30]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[31]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[32]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.

matrix spikes continued ...

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Strontium	[33]	5.94	6.17	mg/L	1	0.0500	5.9	80	4	75 - 125	20
Total Vanadium		0.331	0.319	mg/L	1	0.250	0.058	109	4	75 - 125	20
Total Zinc		0.248	0.238	mg/L	1	0.250	<0.00151	99	4	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7611

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.123	98	90 - 110	2004-02-17
Total Aluminum		mg/L	1.00	0.974	97	90 - 110	2004-02-17
Total Arsenic		mg/L	1.00	0.979	98	90 - 110	2004-02-17
Total Boron		mg/L	1.00	1.01	101	90 - 110	2004-02-17
Total Barium		mg/L	1.00	0.980	98	90 - 110	2004-02-17
Total Beryllium		mg/L	1.00	0.977	98	90 - 110	2004-02-17
Total Cadmium		mg/L	1.00	0.982	98	90 - 110	2004-02-17
Total Cobalt		mg/L	1.00	0.980	98	90 - 110	2004-02-17
Total Chromium		mg/L	1.00	0.982	98	90 - 110	2004-02-17
Total Copper		mg/L	1.00	0.976	98	90 - 110	2004-02-17
Total Iron		mg/L	1.00	0.980	98	90 - 110	2004-02-17
Total Manganese		mg/L	1.00	0.983	98	90 - 110	2004-02-17
Total Molybdenum		mg/L	1.00	0.983	98	90 - 110	2004-02-17
Total Nickel		mg/L	1.00	0.982	98	90 - 110	2004-02-17
Total Phosphorous		mg/L	5.00	4.87	97	90 - 110	2004-02-17
Total Lead		mg/L	1.00	0.986	99	90 - 110	2004-02-17
Total Selenium		mg/L	1.00	0.979	98	90 - 110	2004-02-17
Total Silica		mg/L	5.00	4.85	97	90 - 110	2004-02-17
Total Tin		mg/L	1.00	0.983	98	90 - 110	2004-02-17
Total Strontium		mg/L	1.00	0.961	96	90 - 110	2004-02-17
Total Vanadium		mg/L	1.00	0.980	98	90 - 110	2004-02-17
Total Zinc		mg/L	1.00	0.943	94	90 - 110	2004-02-17

Standard (CCV-1) QC Batch: 7611

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.120	96	90 - 110	2004-02-17
Total Aluminum		mg/L	1.00	0.933	93	90 - 110	2004-02-17
Total Arsenic		mg/L	1.00	0.983	98	90 - 110	2004-02-17
Total Boron		mg/L	1.00	0.964	96	90 - 110	2004-02-17
Total Barium		mg/L	1.00	0.985	98	90 - 110	2004-02-17
Total Beryllium		mg/L	1.00	0.972	97	90 - 110	2004-02-17
Total Cadmium		mg/L	1.00	0.999	100	90 - 110	2004-02-17
Total Cobalt		mg/L	1.00	0.992	99	90 - 110	2004-02-17
Total Chromium		mg/L	1.00	0.988	99	90 - 110	2004-02-17
Total Copper		mg/L	1.00	0.934	93	90 - 110	2004-02-17
Total Iron		mg/L	1.00	0.984	98	90 - 110	2004-02-17

continued ...

[33] MS recovery invalid due to required dilution. LCS demonstrates process under control.

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Manganese		mg/L	1.00	0.983	98	90 - 110	2004-02-17
Total Molybdenum		mg/L	1.00	0.975	98	90 - 110	2004-02-17
Total Nickel		mg/L	1.00	0.990	99	90 - 110	2004-02-17
Total Phosphorous		mg/L	5.00	4.95	99	90 - 110	2004-02-17
Total Lead		mg/L	1.00	0.992	99	90 - 110	2004-02-17
Total Selenium		mg/L	1.00	0.967	97	90 - 110	2004-02-17
Total Silica		mg/L	5.00	4.94	99	90 - 110	2004-02-17
Total Tin		mg/L	1.00	0.996	100	90 - 110	2004-02-17
Total Strontium		mg/L	1.00	0.919	92	90 - 110	2004-02-17
Total Vanadium		mg/L	1.00	0.966	97	90 - 110	2004-02-17
Total Zinc		mg/L	1.00	0.988	99	90 - 110	2004-02-17

Standard (ICV-1) QC Batch: 7821

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.125	100	90 - 110	2004-02-26
Total Aluminum		mg/L	1.00	0.990	99	90 - 110	2004-02-26
Total Arsenic		mg/L	1.00	0.995	100	90 - 110	2004-02-26
Total Boron		mg/L	1.00	1.03	103	90 - 110	2004-02-26
Total Barium		mg/L	1.00	1.00	100	90 - 110	2004-02-26
Total Beryllium		mg/L	1.00	0.999	100	90 - 110	2004-02-26
Total Cadmium		mg/L	1.00	1.00	100	90 - 110	2004-02-26
Total Cobalt		mg/L	1.00	1.00	100	90 - 110	2004-02-26
Total Chromium		mg/L	1.00	1.00	100	90 - 110	2004-02-26
Total Copper		mg/L	1.00	0.989	99	90 - 110	2004-02-26
Total Iron		mg/L	1.00	1.00	100	90 - 110	2004-02-26
Total Manganese		mg/L	1.00	1.00	100	90 - 110	2004-02-26
Total Molybdenum		mg/L	1.00	1.00	100	90 - 110	2004-02-26
Total Nickel		mg/L	1.00	1.00	100	90 - 110	2004-02-26
Total Phosphorous		mg/L	5.00	4.99	100	90 - 110	2004-02-26
Total Lead		mg/L	1.00	1.00	100	90 - 110	2004-02-26
Total Selenium		mg/L	1.00	0.996	100	90 - 110	2004-02-26
Total Silica		mg/L	5.00	4.98	100	90 - 110	2004-02-26
Total Tin		mg/L	1.00	1.00	100	90 - 110	2004-02-26
Total Strontium		mg/L	1.00	0.997	100	90 - 110	2004-02-26
Total Vanadium		mg/L	1.00	0.997	100	90 - 110	2004-02-26
Total Zinc		mg/L	1.00	1.01	101	90 - 110	2004-02-26

Standard (CCV-1) QC Batch: 7821

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.134	107	90 - 110	2004-02-26
Total Aluminum		mg/L	1.00	1.08	108	90 - 110	2004-02-26
Total Arsenic		mg/L	1.00	1.06	106	90 - 110	2004-02-26
Total Boron		mg/L	1.00	1.07	107	90 - 110	2004-02-26

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Barium		mg/L	1.00	1.07	107	90 - 110	2004-02-26
Total Beryllium		mg/L	1.00	1.06	106	90 - 110	2004-02-26
Total Cadmium		mg/L	1.00	1.07	107	90 - 110	2004-02-26
Total Cobalt		mg/L	1.00	1.07	107	90 - 110	2004-02-26
Total Chromium		mg/L	1.00	1.07	107	90 - 110	2004-02-26
Total Copper		mg/L	1.00	1.08	108	90 - 110	2004-02-26
Total Iron		mg/L	1.00	1.07	107	90 - 110	2004-02-26
Total Manganese		mg/L	1.00	1.07	107	90 - 110	2004-02-26
Total Molybdenum		mg/L	1.00	1.07	107	90 - 110	2004-02-26
Total Nickel		mg/L	1.00	1.07	107	90 - 110	2004-02-26
Total Phosphorous		mg/L	5.00	5.31	106	90 - 110	2004-02-26
Total Lead		mg/L	1.00	1.06	106	90 - 110	2004-02-26
Total Selenium		mg/L	1.00	1.05	105	90 - 110	2004-02-26
Total Silica		mg/L	5.00	5.40	108	90 - 110	2004-02-26
Total Tin		mg/L	1.00	1.07	107	90 - 110	2004-02-26
Total Strontium		mg/L	1.00	1.07	107	90 - 110	2004-02-26
Total Vanadium		mg/L	1.00	1.07	107	90 - 110	2004-02-26
Total Zinc		mg/L	1.00	1.06	106	90 - 110	2004-02-26

Standard (ICV-1) QC Batch: 7858

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.124	99	90 - 110	2004-02-27
Total Aluminum		mg/L	1.00	0.977	98	90 - 110	2004-02-27
Total Arsenic		mg/L	1.00	0.982	98	90 - 110	2004-02-27
Total Boron		mg/L	1.00	1.03	103	90 - 110	2004-02-27
Total Barium		mg/L	1.00	0.993	99	90 - 110	2004-02-27
Total Beryllium		mg/L	1.00	0.987	99	90 - 110	2004-02-27
Total Cadmium		mg/L	1.00	0.992	99	90 - 110	2004-02-27
Total Cobalt		mg/L	1.00	0.994	99	90 - 110	2004-02-27
Total Chromium		mg/L	1.00	0.992	99	90 - 110	2004-02-27
Total Copper		mg/L	1.00	0.984	98	90 - 110	2004-02-27
Total Iron		mg/L	1.00	0.992	99	90 - 110	2004-02-27
Total Manganese		mg/L	1.00	0.994	99	90 - 110	2004-02-27
Total Molybdenum		mg/L	1.00	0.990	99	90 - 110	2004-02-27
Total Nickel		mg/L	1.00	0.992	99	90 - 110	2004-02-27
Total Phosphorous		mg/L	5.00	4.95	99	90 - 110	2004-02-27
Total Lead		mg/L	1.00	0.991	99	90 - 110	2004-02-27
Total Selenium		mg/L	1.00	0.989	99	90 - 110	2004-02-27
Total Silica		mg/L	5.00	4.94	99	90 - 110	2004-02-27
Total Tin		mg/L	1.00	0.995	100	90 - 110	2004-02-27
Total Strontium		mg/L	1.00	0.982	98	90 - 110	2004-02-27
Total Vanadium		mg/L	1.00	0.988	99	90 - 110	2004-02-27
Total Zinc		mg/L	1.00	0.998	100	90 - 110	2004-02-27

Standard (CCV-1) QC Batch: 7858

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.125	100	90 - 110	2004-02-27
Total Aluminum		mg/L	1.00	0.995	100	90 - 110	2004-02-27
Total Arsenic		mg/L	1.00	0.987	99	90 - 110	2004-02-27
Total Boron		mg/L	1.00	1.03	103	90 - 110	2004-02-27
Total Barium		mg/L	1.00	0.989	99	90 - 110	2004-02-27
Total Beryllium		mg/L	1.00	0.981	98	90 - 110	2004-02-27
Total Cadmium		mg/L	1.00	0.985	98	90 - 110	2004-02-27
Total Cobalt		mg/L	1.00	0.989	99	90 - 110	2004-02-27
Total Chromium		mg/L	1.00	0.999	100	90 - 110	2004-02-27
Total Copper		mg/L	1.00	0.989	99	90 - 110	2004-02-27
Total Iron		mg/L	1.00	0.990	99	90 - 110	2004-02-27
Total Manganese		mg/L	1.00	0.992	99	90 - 110	2004-02-27
Total Molybdenum		mg/L	1.00	0.988	99	90 - 110	2004-02-27
Total Nickel		mg/L	1.00	0.988	99	90 - 110	2004-02-27
Total Phosphorous		mg/L	5.00	4.90	98	90 - 110	2004-02-27
Total Lead		mg/L	1.00	0.991	99	90 - 110	2004-02-27
Total Selenium		mg/L	1.00	0.984	98	90 - 110	2004-02-27
Total Silica		mg/L	5.00	4.99	100	90 - 110	2004-02-27
Total Tin		mg/L	1.00	0.990	99	90 - 110	2004-02-27
Total Strontium		mg/L	1.00	0.984	98	90 - 110	2004-02-27
Total Vanadium		mg/L	1.00	0.990	99	90 - 110	2004-02-27
Total Zinc		mg/L	1.00	0.985	98	90 - 110	2004-02-27

Standard (ICV-1) QC Batch: 7873

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.126	101	90 - 110	2004-03-01
Total Aluminum		mg/L	1.00	0.994	99	90 - 110	2004-03-01
Total Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-03-01
Total Boron		mg/L	1.00	1.02	102	90 - 110	2004-03-01
Total Barium		mg/L	1.00	1.01	101	90 - 110	2004-03-01
Total Beryllium		mg/L	1.00	1.00	100	90 - 110	2004-03-01
Total Cadmium		mg/L	1.00	1.01	101	90 - 110	2004-03-01
Total Cobalt		mg/L	1.00	1.01	101	90 - 110	2004-03-01
Total Chromium		mg/L	1.00	1.01	101	90 - 110	2004-03-01
Total Copper		mg/L	1.00	1.00	100	90 - 110	2004-03-01
Total Iron		mg/L	1.00	1.01	101	90 - 110	2004-03-01
Total Manganese		mg/L	1.00	1.01	101	90 - 110	2004-03-01
Total Molybdenum		mg/L	1.00	1.00	100	90 - 110	2004-03-01
Total Nickel		mg/L	1.00	1.00	100	90 - 110	2004-03-01
Total Phosphorous		mg/L	5.00	5.02	100	90 - 110	2004-03-01
Total Lead		mg/L	1.00	1.01	101	90 - 110	2004-03-01
Total Selenium		mg/L	1.00	1.01	101	90 - 110	2004-03-01
Total Silica		mg/L	5.00	4.99	100	90 - 110	2004-03-01
Total Tin		mg/L	1.00	1.01	101	90 - 110	2004-03-01
Total Strontium		mg/L	1.00	1.01	101	90 - 110	2004-03-01
Total Vanadium		mg/L	1.00	1.00	100	90 - 110	2004-03-01
Total Zinc		mg/L	1.00	1.01	101	90 - 110	2004-03-01

Standard (CCV-1) QC Batch: 7873

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.118	94	90 - 110	2004-03-01
Total Aluminum		mg/L	1.00	0.931	93	90 - 110	2004-03-01
Total Arsenic		mg/L	1.00	0.947	95	90 - 110	2004-03-01
Total Boron		mg/L	1.00	0.944	94	90 - 110	2004-03-01
Total Barium		mg/L	1.00	0.948	95	90 - 110	2004-03-01
Total Beryllium		mg/L	1.00	0.945	94	90 - 110	2004-03-01
Total Cadmium		mg/L	1.00	0.943	94	90 - 110	2004-03-01
Total Cobalt		mg/L	1.00	0.949	95	90 - 110	2004-03-01
Total Chromium		mg/L	1.00	0.948	95	90 - 110	2004-03-01
Total Copper		mg/L	1.00	0.932	93	90 - 110	2004-03-01
Total Iron		mg/L	1.00	0.946	95	90 - 110	2004-03-01
Total Manganese		mg/L	1.00	0.950	95	90 - 110	2004-03-01
Total Molybdenum		mg/L	1.00	0.945	94	90 - 110	2004-03-01
Total Nickel		mg/L	1.00	0.945	94	90 - 110	2004-03-01
Total Phosphorous		mg/L	5.00	4.71	94	90 - 110	2004-03-01
Total Lead		mg/L	1.00	0.947	95	90 - 110	2004-03-01
Total Selenium		mg/L	1.00	0.940	94	90 - 110	2004-03-01
Total Silica		mg/L	5.00	4.74	95	90 - 110	2004-03-01
Total Tin		mg/L	1.00	0.952	95	90 - 110	2004-03-01
Total Strontium		mg/L	1.00	0.957	96	90 - 110	2004-03-01
Total Vanadium		mg/L	1.00	0.941	94	90 - 110	2004-03-01
Total Zinc		mg/L	1.00	0.952	95	90 - 110	2004-03-01

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7616	Date Analyzed:	2004-02-15	Analyzed By:	BP
Prep Batch:	6812	Date Prepared:	2004-02-13	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		19.4	mg/L	0.1	150	129	81.8 - 161

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7616	Date Analyzed:	2004-02-15	Analyzed By:	BP
Prep Batch:	6812	Date Prepared:	2004-02-13	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		18.3	mg/L	0.1	150	122	81.8 - 161

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7737	Date Analyzed:	2004-02-23	Analyzed By:	BP
Prep Batch:	6894	Date Prepared:	2004-02-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.2	mg/L	0.1	150	95	81.8 - 161

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7737	Date Analyzed:	2004-02-23	Analyzed By:	BP
Prep Batch:	6894	Date Prepared:	2004-02-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.6	mg/L	0.1	150	91	81.8 - 161

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7737	Date Analyzed:	2004-02-23	Analyzed By:	BP
Prep Batch:	6894	Date Prepared:	2004-02-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.7	mg/L	0.1	150	91	81.8 - 161

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7737	Date Analyzed:	2004-02-23	Analyzed By:	BP
Prep Batch:	6894	Date Prepared:	2004-02-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.0	mg/L	0.1	150	93	81.8 - 161

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7737	Date Analyzed:	2004-02-23	Analyzed By:	BP
Prep Batch:	6894	Date Prepared:	2004-02-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.9	mg/L	0.1	150	93	81.8 - 161

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7808	Date Analyzed:	2004-02-25	Analyzed By:	BP
Prep Batch:	6977	Date Prepared:	2004-02-25	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.4	mg/L	0.1	150	96	81.8 - 161

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7808	Date Analyzed:	2004-02-25	Analyzed By:	BP
Prep Batch:	6977	Date Prepared:	2004-02-25	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.4	mg/L	0.1	150	89	81.8 - 161

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7808	Date Analyzed:	2004-02-25	Analyzed By:	BP
Prep Batch:	6977	Date Prepared:	2004-02-25	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.6	mg/L	0.1	150	90	81.8 - 161

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7808	Date Analyzed:	2004-02-25	Analyzed By:	BP
Prep Batch:	6977	Date Prepared:	2004-02-25	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.8	mg/L	0.1	150	92	81.8 - 161

Method Blank (1) QC Batch: 7616

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		19.3	mg/L	0.1	150	129	81.8 - 161

Method Blank (1) QC Batch: 7737

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.8	mg/L	0.1	150	92	81.8 - 161

Method Blank (1) QC Batch: 7808

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.9	mg/L	0.1	150	99	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 7616

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	30.4	30.6	mg/L	0.1	250	<0.538	122	0	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	20.1	19.8	mg/L	0.1	150	134	132	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 7737

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	23.3	23.4	mg/L	0.1	250	<0.538	93	0	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	14.3	14.1	mg/L	0.1	150	95	94	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 7808

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	24.3	25.4	mg/L	0.1	250	<0.538	97	4	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	14.6	15.3	mg/L	0.1	150	98	102	81.8 - 161

Standard (ICV-1) QC Batch: 7616

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	299	120	68 - 140	2004-02-15

Standard (CCV-1) QC Batch: 7616

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	306	122	68 - 140	2004-02-15

Standard (ICV-1) QC Batch: 7737

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	233	93	68 - 140	2004-02-23

Standard (CCV-1) QC Batch: 7737

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	246	98	68 - 140	2004-02-23

Standard (ICV-1) QC Batch: 7808

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	240	96	68 - 140	2004-02-25

Standard (CCV-1) QC Batch: 7808

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	234	94	68 - 140	2004-02-25

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20

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: 27118 - HLSF-0143-HMW-013-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7520	Date Analyzed:	2004-02-11	Analyzed By:	MT
Prep Batch:	6731	Date Prepared:	2004-02-11	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0929	mg/L	1	0.100	93	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0711	mg/L	1	0.100	71	70 - 130

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7520	Date Analyzed:	2004-02-11	Analyzed By:	MT
Prep Batch:	6731	Date Prepared:	2004-02-11	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0900	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0695	mg/L	1	0.100	70	70 - 130

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7782	Date Analyzed:	2004-02-23	Analyzed By:	MT
Prep Batch:	6956	Date Prepared:	2004-02-23	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.500	mg/L	5	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.494	mg/L	5	0.100	99	70 - 130
4-Bromofluorobenzene (4-BFB)	[1]	0.292	mg/L	5	0.100	58	70 - 130

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B

[1] Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.

QC Batch:	7782	Date Analyzed:	2004-02-23	Analyzed By:	MT
Prep Batch:	6956	Date Prepared:	2004-02-23	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.500	mg/L	5	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.456	mg/L	5	0.100	91	70 - 130
4-Bromofluorobenzene (4-BFB)	[2]	0.231	mg/L	5	0.100	46	70 - 130

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7720	Date Analyzed:	2004-02-20	Analyzed By:	MT
Prep Batch:	6905	Date Prepared:	2004-02-20	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.106	mg/L	1	0.100	106	70 - 130
4-Bromofluorobenzene (4-BFB)	[3]	0.0637	mg/L	1	0.100	64	70 - 130

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7720	Date Analyzed:	2004-02-20	Analyzed By:	MT
Prep Batch:	6905	Date Prepared:	2004-02-20	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.105	mg/L	1	0.100	105	70 - 130
4-Bromofluorobenzene (4-BFB)	[4]	0.0663	mg/L	1	0.100	66	70 - 130

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7720	Date Analyzed:	2004-02-20	Analyzed By:	MT
Prep Batch:	6905	Date Prepared:	2004-02-20	Prepared By:	MT

[2]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.
[3]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.
[4]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.105	mg/L	1	0.100	105	70 - 130
4-Bromofluorobenzene (4-BFB)	[5]	0.0608	mg/L	1	0.100	61	70 - 130

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7906	Date Analyzed:	2004-03-01	Analyzed By:	RC
Prep Batch:	7060	Date Prepared:	2004-03-01	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.224	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.110	mg/L	1	0.100	110	70 - 130
4-Bromofluorobenzene (4-BFB)		0.107	mg/L	1	0.100	107	70 - 130

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7906	Date Analyzed:	2004-03-01	Analyzed By:	RC
Prep Batch:	7060	Date Prepared:	2004-03-01	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.197	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.107	mg/L	1	0.100	107	70 - 130
4-Bromofluorobenzene (4-BFB)		0.106	mg/L	1	0.100	106	70 - 130

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7906	Date Analyzed:	2004-03-01	Analyzed By:	RC
Prep Batch:	7060	Date Prepared:	2004-03-01	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.281	mg/L	1	0.100

[5]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.111	mg/L	1	0.100	111	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0999	mg/L	1	0.100	100	70 - 130

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7906	Date Analyzed:	2004-03-01	Analyzed By:	RC
Prep Batch:	7060	Date Prepared:	2004-03-01	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.216	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.106	mg/L	1	0.100	106	70 - 130
4-Bromofluorobenzene (4-BFB)		0.102	mg/L	1	0.100	102	70 - 130

Method Blank (1) QC Batch: 7520

Parameter	Flag	Result	Units	RL
GRO		<0.100	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0912	mg/L	1	0.100	91	44.8 - 160
4-Bromofluorobenzene (4-BFB)		0.0706	mg/L	1	0.100	71	44.1 - 133

Method Blank (1) QC Batch: 7720

Parameter	Flag	Result	Units	RL
GRO		0.158	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0992	mg/L	1	0.100	99	44.8 - 160
4-Bromofluorobenzene (4-BFB)		0.0638	mg/L	1	0.100	64	44.1 - 133

Method Blank (1) QC Batch: 7782

Parameter	Flag	Result	Units	RL
GRO		0.140	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0883	mg/L	1	0.100	88	44.8 - 160
4-Bromofluorobenzene (4-BFB)		0.0559	mg/L	1	0.100	56	44.1 - 133

Method Blank (1) QC Batch: 7906

Parameter	Flag	Result	Units	RL
GRO		0.189	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.104	mg/L	1	0.100	104	44.8 - 160
4-Bromofluorobenzene (4-BFB)		0.101	mg/L	1	0.100	101	44.1 - 133

Laboratory Control Spike (LCS-1) QC Batch: 7520

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	1.11	1.13	mg/L	1	1.00	<0.0261	111	2	68.8 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0907	0.0950	mg/L	1	0.100	91	95	53.5 - 145
4-Bromofluorobenzene (4-BFB)	0.0822	0.0829	mg/L	1	0.100	82	83	54.5 - 134

Laboratory Control Spike (LCS-1) QC Batch: 7720

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	1.08	0.911	mg/L	1	1.00	<0.0261	108	17	68.8 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.105	0.105	mg/L	1	0.100	105	105	53.5 - 145
4-Bromofluorobenzene (4-BFB)	0.0845	0.0837	mg/L	1	0.100	84	84	54.5 - 134

Laboratory Control Spike (LCS-1) QC Batch: 7782

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	0.942	0.914	mg/L	1	1.00	<0.0261	94	3	68.8 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.104	0.103	mg/L	1	0.100	104	103	53.5 - 145
4-Bromofluorobenzene (4-BFB)	0.0795	0.0793	mg/L	1	0.100	80	79	54.5 - 134

Laboratory Control Spike (LCS-1) QC Batch: 7906

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	[6]	1.04	1.24	mg/L	1	1.00	<0.0261	104	18	68.8 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.111	0.112	mg/L	1	0.100	111	112	53.5 - 145
4-Bromofluorobenzene (4-BFB)	0.115	0.118	mg/L	1	0.100	115	118	54.5 - 134

Standard (ICV-1) QC Batch: 7520

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.14	114	85 - 115	2004-02-11

Standard (CCV-1) QC Batch: 7520

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.06	106	85 - 115	2004-02-11

Standard (ICV-1) QC Batch: 7720

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.910	91	85 - 115	2004-02-20

Standard (CCV-1) QC Batch: 7720

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.922	92	85 - 115	2004-02-20

Standard (ICV-1) QC Batch: 7782

[6] The average of the LCS/LCSD shows that the process is in control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.983	98	85 - 115	2004-02-23

Standard (CCV-1) QC Batch: 7782

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.865	86	85 - 115	2004-02-23

Standard (ICV-1) QC Batch: 7906

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.906	91	85 - 115	2004-03-01

Standard (CCV-1) QC Batch: 7906

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.01	101	85 - 115	2004-03-01

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 15, 2004

Work Order: 4021016

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
27118	HLSF-0143-HMW-013-0204	water	2004-02-09	13:25	2004-02-10
27119	HLSF-0143-TB-226	water	2004-02-09	13:25	2004-02-10
27120	HLSF-0143-HMW-113-0204	water	2004-02-09	13:25	2004-02-10
27121	HLSF-0143-TB-227	water	2004-02-09	13:25	2004-02-10
27614	HLSF-0143-HMW-037-0204	water	2004-02-17	15:07	2004-02-18
27615	HLSF-0143-TB-229	water	2004-02-17	15:07	2004-02-18
27616	HLSF-0143-HMW-038-0204	water	2004-02-17	14:58	2004-02-18
27617	HLSF-0143-TB-230	water	2004-02-17	14:58	2004-02-18
27721	HLSF-0143-HMW-011-0204	water	2004-02-18	13:22	2004-02-19
27722	HLSF-0143-TB-225	water	2004-02-18	13:22	2004-02-19
27723	HLSF-0143-HMW-036-0204	water	2004-02-18	14:15	2004-02-19
27724	HLSF-0143-TB-0228	water	2004-02-18	14:15	2004-02-19
27725	HLSF-0143-HMW-043-0204	water	2004-02-18	14:45	2004-02-19
27726	HLSF-0143-TB-235	water	2004-02-18	14:45	2004-02-19
27957	HLSF-0143-HMW-139-0204	water	2004-02-20	12:00	2004-02-20
27958	HLSF-0143-TB-232	water	2004-02-20	12:00	2004-02-20
27959	HLSF-0143-HMW-040-0204	water	2004-02-20	13:00	2004-02-20
27960	HLSF-0143-TB-233	water	2004-02-20	13:00	2004-02-20
27961	HLSF-0143-HMW-041-0204	water	2004-02-20	12:49	2004-02-20
27962	HLSF-0143-TB-234	water	2004-02-20	12:49	2004-02-20
27963	HLSF-0143-HMW-039-0204	water	2004-02-20	12:00	2004-02-20
27964	HLSF-0143-TB-231	water	2004-02-20	12:00	2004-02-20

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 50 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 27118 - HLSF-0143-HMW-013-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7578	Date Analyzed:	2004-02-13	Analyzed By:	JG
Prep Batch:	6785	Date Prepared:	2004-02-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		<1.00	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		1.03	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00

continued . . .

sample 27118 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.6	μg/L	1	50.0	99	70 - 130
Toluene-d8		47.6	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		46.6	μg/L	1	50.0	93	70 - 130

Sample: 27119 - HLSF-0143-TB-226

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7578	Date Analyzed:	2004-02-13	Analyzed By:	JG
Prep Batch:	6785	Date Prepared:	2004-02-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00

continued . . .

sample 27119 continued . . .

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

continued . . .

sample 27119 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.1	μg/L	1	50.0	100	70 - 130
Toluene-d8		47.7	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		46.6	μg/L	1	50.0	93	70 - 130

Sample: 27120 - HLSF-0143-HMW-113-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7578	Date Analyzed:	2004-02-13	Analyzed By:	JG
Prep Batch:	6785	Date Prepared:	2004-02-13	Prepared By:	JG

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

continued . . .

sample 27120 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.9	μg/L	1	50.0	100	70 - 130
Toluene-d8		47.3	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		46.8	μg/L	1	50.0	94	70 - 130

Sample: 27121 - HLSF-0143-TB-227

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7578	Date Analyzed:	2004-02-13	Analyzed By:	JG
Prep Batch:	6785	Date Prepared:	2004-02-13	Prepared By:	JG

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

continued . . .

sample 27121 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.0	μg/L	1	50.0	100	70 - 130
Toluene-d8		47.2	μg/L	1	50.0	94	70 - 130
4-Bromofluorobenzene (4-BFB)		46.2	μg/L	1	50.0	92	70 - 130

Sample: 27614 - HLSF-0143-HMW-037-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7727	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6907	Date Prepared:	2004-02-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00

continued . . .

sample 27614 continued . . .

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

continued . . .

sample 27614 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.7	μg/L	1	50.0	97	70 - 130
Toluene-d8		49.6	μg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		46.1	μg/L	1	50.0	92	70 - 130

Sample: 27615 - HLSF-0143-TB-229

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7727	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6907	Date Prepared:	2004-02-20	Prepared By:	JG

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

continued . . .

sample 27615 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.9	μg/L	1	50.0	98	70 - 130
Toluene-d8		48.9	μg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		45.7	μg/L	1	50.0	91	70 - 130

Sample: 27616 - HLSF-0143-HMW-038-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7727	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6907	Date Prepared:	2004-02-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		<1.00	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		10.6	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00

continued . . .

sample 27616 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.7	μg/L	1	50.0	97	70 - 130
Toluene-d8		48.9	μg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		45.7	μg/L	1	50.0	91	70 - 130

Sample: 27617 - HLSF-0143-TB-230

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7727	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6907	Date Prepared:	2004-02-20	Prepared By:	JG

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

continued . . .

sample 27617 continued . . .

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

continued . . .

sample 27617 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.4	μg/L	1	50.0	99	70 - 130
Toluene-d8		48.7	μg/L	1	50.0	97	70 - 130
4-Bromofluorobenzene (4-BFB)		46.0	μg/L	1	50.0	92	70 - 130

Sample: 27721 - HLSF-0143-HMW-011-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7751	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6930	Date Prepared:	2004-02-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		<1.00	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		1.90	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		1.66	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		43.8	μg/L	1	1.00

continued . . .

sample 27721 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.9	μg/L	1	50.0	102	70 - 130
Toluene-d8		49.9	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		39.7	μg/L	1	50.0	79	70 - 130

Sample: 27722 - HLSF-0143-TB-225

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7751	Date Analyzed:	2004-02-20	Analyzed By:	JG

Prep Batch: 6930 Date Prepared: 2004-02-20 Prepared By: JG

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

continued . . .

sample 27722 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.0	μg/L	1	50.0	98	70 - 130
Toluene-d8		51.4	μg/L	1	50.0	103	70 - 130
4-Bromofluorobenzene (4-BFB)		38.0	μg/L	1	50.0	76	70 - 130

Sample: 27723 - HLSF-0143-HMW-036-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7751	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6930	Date Prepared:	2004-02-20	Prepared By:	JG

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

continued . . .

sample 27723 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		3.91	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		<1.00	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00

continued . . .

sample 27723 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.0	μg/L	1	50.0	102	70 - 130
Toluene-d8		50.5	μg/L	1	50.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)		39.0	μg/L	1	50.0	78	70 - 130

Sample: 27724 - HLSF-0143-TB-0228

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7751	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6930	Date Prepared:	2004-02-20	Prepared By:	JG

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

continued . . .

sample 27724 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.9	μg/L	1	50.0	102	70 - 130
Toluene-d8		50.6	μg/L	1	50.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)		39.2	μg/L	1	50.0	78	70 - 130

Sample: 27725 - HLSF-0143-HMW-043-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7751	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6930	Date Prepared:	2004-02-20	Prepared By:	JG

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

continued . . .

sample 27725 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.7	μg/L	1	50.0	101	70 - 130
Toluene-d8		49.3	μg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		40.0	μg/L	1	50.0	80	70 - 130

Sample: 27726 - HLSF-0143-TB-235

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7751	Date Analyzed:	2004-02-20	Analyzed By:	JG
Prep Batch:	6930	Date Prepared:	2004-02-20	Prepared By:	JG

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

continued . . .

sample 27726 continued . . .

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

continued . . .

sample 27726 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.2	μg/L	1	50.0	102	70 - 130
Toluene-d8		50.0	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		39.1	μg/L	1	50.0	78	70 - 130

Sample: 27957 - HLSF-0143-HMW-139-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7852	Date Analyzed:	2004-02-25	Analyzed By:	JG
Prep Batch:	7015	Date Prepared:	2004-02-25	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		1.35	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		63.3	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00

continued . . .

sample 27957 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.6	μg/L	1	50.0	99	70 - 130
Toluene-d8		50.4	μg/L	1	50.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)		45.7	μg/L	1	50.0	91	70 - 130

Sample: 27958 - HLSF-0143-TB-232

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7852	Date Analyzed:	2004-02-25	Analyzed By:	JG
Prep Batch:	7015	Date Prepared:	2004-02-25	Prepared By:	JG

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

continued . . .

sample 27958 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.3	μg/L	1	50.0	99	70 - 130
Toluene-d8		50.2	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		46.0	μg/L	1	50.0	92	70 - 130

Sample: 27959 - HLSF-0143-HMW-040-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7852	Date Analyzed:	2004-02-25	Analyzed By:	JG
Prep Batch:	7015	Date Prepared:	2004-02-25	Prepared By:	JG

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

continued . . .

sample 27959 continued . . .

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

continued . . .

sample 27959 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.0	μg/L	1	50.0	98	70 - 130
Toluene-d8		50.0	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		45.8	μg/L	1	50.0	92	70 - 130

Sample: 27960 - HLSF-0143-TB-233

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7852	Date Analyzed:	2004-02-25	Analyzed By:	JG
Prep Batch:	7015	Date Prepared:	2004-02-25	Prepared By:	JG

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

continued . . .

sample 27960 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.1	μg/L	1	50.0	98	70 - 130
Toluene-d8		50.0	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		45.7	μg/L	1	50.0	91	70 - 130

Sample: 27961 - HLSF-0143-HMW-041-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8006	Date Analyzed:	2004-03-04	Analyzed By:	JG
Prep Batch:	7150	Date Prepared:	2004-03-04	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<5.00	μg/L	5	1.00
Dichlorodifluoromethane		<5.00	μg/L	5	1.00
Chloromethane (methyl chloride)		<5.00	μg/L	5	1.00
Vinyl Chloride		<5.00	μg/L	5	1.00
Bromomethane (methyl bromide)		<25.0	μg/L	5	5.00
Chloroethane		<5.00	μg/L	5	1.00
Trichlorofluoromethane		<5.00	μg/L	5	1.00
Acetone		<50.0	μg/L	5	10.0
Iodomethane (methyl iodide)		<25.0	μg/L	5	5.00
Carbon Disulfide		<5.00	μg/L	5	1.00
Acrylonitrile		<5.00	μg/L	5	1.00
2-Butanone (MEK)		<25.0	μg/L	5	5.00
4-Methyl-2-pentanone (MIBK)		<25.0	μg/L	5	5.00
2-Hexanone		<25.0	μg/L	5	5.00
trans 1,4-Dichloro-2-butene		<50.0	μg/L	5	10.0
1,1-Dichloroethene		<5.00	μg/L	5	1.00
Methylene chloride		<25.0	μg/L	5	5.00
MTBE		<5.00	μg/L	5	1.00
trans-1,2-Dichloroethene		<5.00	μg/L	5	1.00
1,1-Dichloroethane		<5.00	μg/L	5	1.00
cis-1,2-Dichloroethene		<5.00	μg/L	5	1.00
2,2-Dichloropropane		<5.00	μg/L	5	1.00
1,2-Dichloroethane (EDC)		<5.00	μg/L	5	1.00
Chloroform		<5.00	μg/L	5	1.00
1,1,1-Trichloroethane		<5.00	μg/L	5	1.00
1,1-Dichloropropene		<5.00	μg/L	5	1.00
Benzene		<5.00	μg/L	5	1.00
Carbon Tetrachloride		<5.00	μg/L	5	1.00
1,2-Dichloropropane		<5.00	μg/L	5	1.00
Trichloroethene (TCE)		131	μg/L	5	1.00
Dibromomethane (methylene bromide)		<5.00	μg/L	5	1.00
Bromodichloromethane		<5.00	μg/L	5	1.00
2-Chloroethyl vinyl ether		<25.0	μg/L	5	5.00
cis-1,3-Dichloropropene		<5.00	μg/L	5	1.00
trans-1,3-Dichloropropene		<5.00	μg/L	5	1.00
Toluene		<5.00	μg/L	5	1.00
1,1,2-Trichloroethane		<5.00	μg/L	5	1.00
1,3-Dichloropropane		<5.00	μg/L	5	1.00
Dibromochloromethane		<5.00	μg/L	5	1.00
1,2-Dibromoethane (EDB)		<5.00	μg/L	5	1.00
Tetrachloroethene (PCE)		<5.00	μg/L	5	1.00
Chlorobenzene		<5.00	μg/L	5	1.00
1,1,1,2-Tetrachloroethane		<5.00	μg/L	5	1.00
Ethylbenzene		<5.00	μg/L	5	1.00
m,p-Xylene		<5.00	μg/L	5	1.00
Bromoform		<5.00	μg/L	5	1.00
Styrene		<5.00	μg/L	5	1.00
o-Xylene		<5.00	μg/L	5	1.00
1,1,2,2-Tetrachloroethane		<5.00	μg/L	5	1.00
2-Chlorotoluene		<5.00	μg/L	5	1.00
1,2,3-Trichloropropane		<5.00	μg/L	5	1.00
Isopropylbenzene		<5.00	μg/L	5	1.00

continued . . .

sample 27961 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bromobenzene		<5.00	μg/L	5	1.00
n-Propylbenzene		<5.00	μg/L	5	1.00
1,3,5-Trimethylbenzene		<5.00	μg/L	5	1.00
tert-Butylbenzene		<5.00	μg/L	5	1.00
1,2,4-Trimethylbenzene		<5.00	μg/L	5	1.00
1,4-Dichlorobenzene (para)		<5.00	μg/L	5	1.00
sec-Butylbenzene		<5.00	μg/L	5	1.00
1,3-Dichlorobenzene (meta)		<5.00	μg/L	5	1.00
p-Isopropyltoluene		<5.00	μg/L	5	1.00
4-Chlorotoluene		<5.00	μg/L	5	1.00
1,2-Dichlorobenzene (ortho)		<5.00	μg/L	5	1.00
n-Butylbenzene		<5.00	μg/L	5	1.00
1,2-Dibromo-3-chloropropane		<25.0	μg/L	5	5.00
1,2,3-Trichlorobenzene		<25.0	μg/L	5	5.00
1,2,4-Trichlorobenzene		<25.0	μg/L	5	5.00
Naphthalene		<25.0	μg/L	5	5.00
Hexachlorobutadiene		<25.0	μg/L	5	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.0	μg/L	1	50.0	100	70 - 130
Toluene-d8		49.8	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		48.2	μg/L	1	50.0	96	70 - 130

Sample: 27962 - HLSF-0143-TB-234

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7852	Date Analyzed:	2004-02-25	Analyzed By:	JG
Prep Batch:	7015	Date Prepared:	2004-02-25	Prepared By:	JG

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

continued . . .

sample 27962 continued . . .

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

continued . . .

sample 27962 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.6	μg/L	1	50.0	97	70 - 130
Toluene-d8		49.9	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		46.0	μg/L	1	50.0	92	70 - 130

Sample: 27963 - HLSF-0143-HMW-039-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7852	Date Analyzed:	2004-02-25	Analyzed By:	JG
Prep Batch:	7015	Date Prepared:	2004-02-25	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		1.55	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		63.4	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00

continued . . .

sample 27963 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.6	μg/L	1	50.0	99	70 - 130
Toluene-d8		50.0	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		46.8	μg/L	1	50.0	94	70 - 130

Sample: 27964 - HLSF-0143-TB-231

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7852	Date Analyzed:	2004-02-25	Analyzed By:	JG
Prep Batch:	7015	Date Prepared:	2004-02-25	Prepared By:	JG

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

continued . . .

sample 27964 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.6	μg/L	1	50.0	99	70 - 130
Toluene-d8		49.8	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		46.3	μg/L	1	50.0	93	70 - 130

Method Blank (1) QC Batch: 7578

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.8	μg/L	1	50.0	100	70 - 130

continued . . .

method blank continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Toluene-d8		47.9	μg/L	1	50.0	96	70 - 130
4-Bromofluorobenzene (4-BFB)		46.8	μg/L	1	50.0	94	70 - 130

Method Blank (1) QC Batch: 7727

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.4	μg/L	1	50.0	99	70 - 130
Toluene-d8		49.3	μg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		46.1	μg/L	1	50.0	92	70 - 130

Method Blank (1) QC Batch: 7751

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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
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 (meta)		<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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.1	μg/L	1	50.0	100	70 - 130
Toluene-d8		50.0	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		41.2	μg/L	1	50.0	82	70 - 130

Method Blank (1) QC Batch: 7852

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.0	μg/L	1	50.0	98	70 - 130
Toluene-d8		50.1	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		46.9	μg/L	1	50.0	94	70 - 130

Method Blank (1) QC Batch: 8006

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Chloroethane		<1.00	µg/L	1
Trichlorofluoromethane		<1.00	µg/L	1
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<5.00	µg/L	5
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
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
1,4-Dichlorobenzene (para)		<1.00	μg/L	1
sec-Butylbenzene		<1.00	μg/L	1
1,3-Dichlorobenzene (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.6	μg/L	1	50.0	99	70 - 130
Toluene-d8		50.0	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		48.7	μg/L	1	50.0	97	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 7578

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	89.8	88.5	μg/L	1	100	<0.136	90	1	78 - 120	20
Benzene	95.0	90.7	μg/L	1	100	<0.146	95	5	84.2 - 108	20
Trichloroethene (TCE)	94.5	91.2	μg/L	1	100	0.12	94	4	85.8 - 106	20
Toluene	96.3	92.3	μg/L	1	100	0.19	96	4	77.2 - 104	20
Chlorobenzene	95.2	92.2	μg/L	1	100	<0.0540	95	3	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	48.7	49.0	μg/L	1	50.0	97	98	84.2 - 115
Toluene-d8	48.7	47.4	μg/L	1	50.0	97	95	94.6 - 103
4-Bromofluorobenzene (4-BFB)	48.3	47.2	μg/L	1	50.0	97	94	82.4 - 102

Laboratory Control Spike (LCS-1) QC Batch: 7727

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	91.6	92.1	μg/L	1	100	<0.136	92	0	78 - 120	20
Benzene	94.4	92.7	μg/L	1	100	0.16	94	2	84.2 - 108	20
Trichloroethene (TCE)	96.9	95.7	μg/L	1	100	0.14	97	1	85.8 - 106	20
Toluene	95.3	93.8	μg/L	1	100	0.22	95	2	77.2 - 104	20
Chlorobenzene	96.0	96.0	μg/L	1	100	<0.0540	96	0	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	48.2	48.7	μg/L	1	50.0	96	97	84.2 - 115
Toluene-d8	49.4	49.5	μg/L	1	50.0	99	99	94.6 - 103
4-Bromofluorobenzene (4-BFB)	47.1	46.5	μg/L	1	50.0	94	93	82.4 - 102

Laboratory Control Spike (LCS-1) QC Batch: 7751

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	91.8	93.2	μg/L	1	100	<0.136	92	2	78 - 120	20
Benzene	94.2	92.7	μg/L	1	100	0.17	94	2	84.2 - 108	20
Trichloroethene (TCE)	95.7	95.8	μg/L	1	100	0.15	96	0	85.8 - 106	20
Toluene	93.0	90.7	μg/L	1	100	0.27	93	2	77.2 - 104	20
Chlorobenzene	96.0	95.1	μg/L	1	100	<0.0540	96	1	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	49.6	49.8	μg/L	1	50.0	99	100	84.2 - 115
Toluene-d8	49.5	49.7	μg/L	1	50.0	99	99	94.6 - 103
4-Bromofluorobenzene (4-BFB)	42.6	41.6	μg/L	1	50.0	85	83	82.4 - 102

Laboratory Control Spike (LCS-1) QC Batch: 7852

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	87.7	88.3	μg/L	1	100	<0.136	88	1	78 - 120	20
Benzene	92.3	91.7	μg/L	1	100	<0.146	92	1	84.2 - 108	20
Trichloroethene (TCE)	94.3	93.4	μg/L	1	100	0.13	94	1	85.8 - 106	20
Toluene	92.5	92.0	μg/L	1	100	0.23	92	0	77.2 - 104	20
Chlorobenzene	95.2	94.7	μg/L	1	100	<0.0540	95	0	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	48.5	48.7	μg/L	1	50.0	97	97	84.2 - 115
Toluene-d8	50.0	50.3	μg/L	1	50.0	100	101	94.6 - 103
4-Bromofluorobenzene (4-BFB)	47.2	46.8	μg/L	1	50.0	94	94	82.4 - 102

Laboratory Control Spike (LCS-1) QC Batch: 8006

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	82.3	84.0	μg/L	1	100	<0.136	82	2	78 - 120	20
Benzene	90.5	93.1	μg/L	1	100	<0.146	90	3	84.2 - 108	20
Trichloroethene (TCE)	93.6	95.8	μg/L	1	100	0.17	94	2	85.8 - 106	20
Toluene	92.8	93.8	μg/L	1	100	0.2	93	1	77.2 - 104	20
Chlorobenzene	93.9	97.3	μg/L	1	100	<0.0540	94	4	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	49.2	49.6	μg/L	1	50.0	98	99	84.2 - 115
Toluene-d8	49.7	50.8	μg/L	1	50.0	99	102	94.6 - 103
4-Bromofluorobenzene (4-BFB)	49.2	49.4	μg/L	1	50.0	98	99	82.4 - 102

Matrix Spike (MS-1) QC Batch: 7578

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	88.0	90.5	μg/L	1	100	<0.136	88	3	74.6 - 124	20
Benzene	90.0	92.0	μg/L	1	100	<0.146	90	2	88.1 - 114	20
Trichloroethene (TCE)	91.0	93.5	μg/L	1	100	<0.117	91	3	86.7 - 104	20
Toluene	91.5	93.5	μg/L	1	100	<0.0600	92	2	84 - 114	20
Chlorobenzene	91.0	93.0	μg/L	1	100	<0.0540	91	2	92.3 - 109	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	49.3	49.4	μg/L	1	50	99	99	86.5 - 113
Toluene-d8	47.2	47.4	μg/L	1	50	94	95	93.7 - 105
4-Bromofluorobenzene (4-BFB)	47.2	46.7	μg/L	1	50	94	93	76.2 - 107

Matrix Spike (MS-1) QC Batch: 7727

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	93.6	92.5	μg/L	1	100	<0.136	94	1	74.6 - 124	20
Benzene	92.9	91.9	μg/L	1	100	<0.146	93	1	88.1 - 114	20
Trichloroethene (TCE)	94.7	94.6	μg/L	1	100	<0.117	95	0	86.7 - 104	20
Toluene	88.9	89.6	μg/L	1	100	<0.0600	89	1	84 - 114	20
Chlorobenzene	94.4	94.6	μg/L	1	100	<0.0540	94	0	92.3 - 109	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	51.0	50.0	μg/L	1	50	102	100	86.5 - 113
Toluene-d8	51.3	48.7	μg/L	1	50	103	97	93.7 - 105
4-Bromofluorobenzene (4-BFB) [1,2]	37.0	38.0	μg/L	1	50	74	76	76.2 - 107

Matrix Spike (MS-1) QC Batch: 7852

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	87.1	88.3	μg/L	1	100	1.55	87	1	74.6 - 124	20
Benzene [3]	88.1	90.0	μg/L	1	100	<0.146	88	2	88.1 - 114	20
Trichloroethene (TCE)	158	158	μg/L	1	100	63.4	95	0	86.7 - 104	20

continued . . .

[1]low recovery due to trap degradation. LCS/LCSD passed.
[2]low recovery due to trap degradation. LCS/LCSD passed.
[3]recovery within acceptable limits.

matrix spikes continued . . .

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Toluene	90.0	89.8	μg/L	1	100	<0.0600	90	0	84 - 114	20
Chlorobenzene	93.1	93.8	μg/L	1	100	<0.0540	93	1	92.3 - 109	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	47.8	47.8	μg/L	1	50	96	96	86.5 - 113
Toluene-d8	49.4	49.6	μg/L	1	50	99	99	93.7 - 105
4-Bromofluorobenzene (4-BFB)	46.0	45.9	μg/L	1	50	92	92	76.2 - 107

Standard (CCV-1) QC Batch: 7578

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	50.1	100	80 - 120	2004-02-13
1,1-Dichloroethene		μg/L	50.0	49.2	98	80 - 120	2004-02-13
Chloroform		μg/L	50.0	49.4	99	80 - 120	2004-02-13
1,2-Dichloropropane		μg/L	50.0	50.6	101	80 - 120	2004-02-13
Toluene		μg/L	50.0	50.8	102	80 - 120	2004-02-13
Chlorobenzene		μg/L	50.0	49.6	99	80 - 120	2004-02-13
Ethylbenzene		μg/L	50.0	51.8	104	80 - 120	2004-02-13

Standard (CCV-1) QC Batch: 7727

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	50.0	100	80 - 120	2004-02-20
1,1-Dichloroethene		μg/L	50.0	50.4	101	80 - 120	2004-02-20
Chloroform		μg/L	50.0	46.4	93	80 - 120	2004-02-20
1,2-Dichloropropane		μg/L	50.0	46.6	93	80 - 120	2004-02-20
Toluene		μg/L	50.0	48.5	97	80 - 120	2004-02-20
Chlorobenzene		μg/L	50.0	49.1	98	80 - 120	2004-02-20
Ethylbenzene		μg/L	50.0	49.6	99	80 - 120	2004-02-20

Standard (CCV-1) QC Batch: 7751

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	47.9	96	80 - 120	2004-02-20
1,1-Dichloroethene		μg/L	50.0	51.1	102	80 - 120	2004-02-20
Chloroform		μg/L	50.0	46.6	93	80 - 120	2004-02-20
1,2-Dichloropropane		μg/L	50.0	46.0	92	80 - 120	2004-02-20
Toluene		μg/L	50.0	47.2	94	80 - 120	2004-02-20
Chlorobenzene		μg/L	50.0	48.9	98	80 - 120	2004-02-20
Ethylbenzene		μg/L	50.0	47.8	96	80 - 120	2004-02-20

Standard (CCV-1) QC Batch: 7852

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	47.2	94	80 - 120	2004-02-25
1,1-Dichloroethene		µg/L	50.0	46.4	93	80 - 120	2004-02-25
Chloroform		µg/L	50.0	43.8	88	80 - 120	2004-02-25
1,2-Dichloropropane		µg/L	50.0	47.7	95	80 - 120	2004-02-25
Toluene		µg/L	50.0	46.3	93	80 - 120	2004-02-25
Chlorobenzene		µg/L	50.0	47.9	96	80 - 120	2004-02-25
Ethylbenzene		µg/L	50.0	48.8	98	80 - 120	2004-02-25

Standard (CCV-1) QC Batch: 8006

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	55.9	112	80 - 120	2004-03-04
1,1-Dichloroethene		µg/L	50.0	47.1	94	80 - 120	2004-03-04
Chloroform		µg/L	50.0	45.8	92	80 - 120	2004-03-04
1,2-Dichloropropane		µg/L	50.0	49.2	98	80 - 120	2004-03-04
Toluene		µg/L	50.0	48.5	97	80 - 120	2004-03-04
Chlorobenzene		µg/L	50.0	50.1	100	80 - 120	2004-03-04
Ethylbenzene		µg/L	50.0	51.0	102	80 - 120	2004-03-04

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	11558	Date Analyzed:	2004-07-29	Analyzed By:	JG
Prep Batch:	10210	Date Prepared:	2004-07-29	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		132	mg/L as CaCo3	1	4.00
Total Alkalinity		132	mg/L as CaCo3	1	4.00

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	11558	Date Analyzed:	2004-07-29	Analyzed By:	JG
Prep Batch:	10210	Date Prepared:	2004-07-29	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		256	mg/L as CaCo3	1	4.00
Total Alkalinity		256	mg/L as CaCo3	1	4.00

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	11558	Date Analyzed:	2004-07-29	Analyzed By:	JG
Prep Batch:	10210	Date Prepared:	2004-07-29	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		202	mg/L as CaCo3	1	4.00
Total Alkalinity		202	mg/L as CaCo3	1	4.00

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	11558	Date Analyzed:	2004-07-29	Analyzed By:	JG
Prep Batch:	10210	Date Prepared:	2004-07-29	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00

continued . . .

sample 39918 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bicarbonate Alkalinity		146	mg/L as CaCo3	1	4.00
Total Alkalinity		146	mg/L as CaCo3	1	4.00

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12019	Date Analyzed:	2004-08-10	Analyzed By:	JG
Prep Batch:	10622	Date Prepared:	2004-08-10	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		148	mg/L as CaCo3	1	4.00
Total Alkalinity		148	mg/L as CaCo3	1	4.00

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12019	Date Analyzed:	2004-08-10	Analyzed By:	JG
Prep Batch:	10622	Date Prepared:	2004-08-10	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		588	mg/L as CaCo3	1	4.00
Total Alkalinity		588	mg/L as CaCo3	1	4.00

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	11558	Date Analyzed:	2004-07-29	Analyzed By:	JG
Prep Batch:	10210	Date Prepared:	2004-07-29	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		144	mg/L as CaCo3	1	4.00
Total Alkalinity		144	mg/L as CaCo3	1	4.00

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A

QC Batch: 11558 Date Analyzed: 2004-07-29 Analyzed By: JG
Prep Batch: 10210 Date Prepared: 2004-07-29 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		152	mg/L as CaCo3	1	4.00
Total Alkalinity		152	mg/L as CaCo3	1	4.00

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A
QC Batch: 12019 Date Analyzed: 2004-08-10 Analyzed By: JG
Prep Batch: 10622 Date Prepared: 2004-08-10 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		176	mg/L as CaCo3	1	4.00
Total Alkalinity		176	mg/L as CaCo3	1	4.00

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A
QC Batch: 12019 Date Analyzed: 2004-08-10 Analyzed By: JG
Prep Batch: 10622 Date Prepared: 2004-08-10 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		174	mg/L as CaCo3	1	4.00
Total Alkalinity		174	mg/L as CaCo3	1	4.00

Method Blank (1) QC Batch: 11558

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 12019

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Duplicate (1) QC Batch: 11558

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Bicarbonate Alkalinity	160	152	mg/L as CaCo3	1	5	6.3
Total Alkalinity	160	152	mg/L as CaCo3	1	5	6.3

Duplicate (1) QC Batch: 12019

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Bicarbonate Alkalinity	588	588	mg/L as CaCo3	1	0	6.3
Total Alkalinity	588	588	mg/L as CaCo3	1	0	6.3

Standard (ICV-1) QC Batch: 11558

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 105	2004-07-29

Standard (CCV-1) QC Batch: 11558

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 105	2004-07-29

Standard (ICV-1) QC Batch: 12019

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 105	2004-08-10

Standard (CCV-1) QC Batch: 12019

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 105	2004-08-10

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11524	Date Analyzed:	2004-07-29	Analyzed By:	WB
Prep Batch:	10185	Date Prepared:	2004-07-29	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11524	Date Analyzed:	2004-07-29	Analyzed By:	WB
Prep Batch:	10185	Date Prepared:	2004-07-29	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11524	Date Analyzed:	2004-07-29	Analyzed By:	WB
Prep Batch:	10185	Date Prepared:	2004-07-29	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11524	Date Analyzed:	2004-07-29	Analyzed By:	WB
Prep Batch:	10185	Date Prepared:	2004-07-29	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11709	Date Analyzed:	2004-08-06	Analyzed By:	WB
Prep Batch:	10340	Date Prepared:	2004-08-06	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.0	mg/L	1	1.00

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11709	Date Analyzed:	2004-08-06	Analyzed By:	WB
Prep Batch:	10340	Date Prepared:	2004-08-06	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.0	mg/L	1	1.00

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11709	Date Analyzed:	2004-08-06	Analyzed By:	WB
Prep Batch:	10340	Date Prepared:	2004-08-06	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.0	mg/L	1	1.00

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11709	Date Analyzed:	2004-08-06	Analyzed By:	WB
Prep Batch:	10340	Date Prepared:	2004-08-06	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.0	mg/L	1	1.00

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11709	Date Analyzed:	2004-08-06	Analyzed By:	WB
Prep Batch:	10340	Date Prepared:	2004-08-06	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.0	mg/L	1	1.00

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11709	Date Analyzed:	2004-08-06	Analyzed By:	WB

Prep Batch: 10340 Date Prepared: 2004-08-06 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.0	mg/L	1	1.00

Method Blank (1) QC Batch: 11524

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Method Blank (1) QC Batch: 11709

Parameter	Flag	Result	Units	RL
Ammonia-N		< 1.0	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 11524

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.42	4.59	mg/L	1	5.00	<0.318	88	4	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11709

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.82	4.87	mg/L	1	5.00	<0.318	96	1	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11524

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.59	4.59	mg/L	1	5.00	<0.318	92	0	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11709

continued . . .

matrix spikes continued . . .

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	5.10	5.15	mg/L	1	5.00	<0.318	102	1	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11524

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.48	90	85 - 115	2004-07-29

Standard (CCV-1) QC Batch: 11524

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.65	93	85 - 115	2004-07-29

Standard (ICV-1) QC Batch: 11709

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.87	97	85 - 115	2004-08-06

Standard (CCV-1) QC Batch: 11709

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	5.04	101	85 - 115	2004-08-06

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11331	Date Analyzed:	2004-07-23	Analyzed By:	MK
Prep Batch:	10018	Date Prepared:	2004-07-23	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		35200	μMHOS/cm	1	0.00

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11331	Date Analyzed:	2004-07-23	Analyzed By:	MK
Prep Batch:	10018	Date Prepared:	2004-07-23	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		21300	μMHOS/cm	1	0.00

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11920	Date Analyzed:	2004-08-02	Analyzed By:	MK
Prep Batch:	10537	Date Prepared:	2004-08-02	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		17400	μMHOS/cm	1	0.00

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11920	Date Analyzed:	2004-08-02	Analyzed By:	MK
Prep Batch:	10537	Date Prepared:	2004-08-02	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		7780	μMHOS/cm	1	0.00

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11920	Date Analyzed:	2004-08-02	Analyzed By:	MK
Prep Batch:	10537	Date Prepared:	2004-08-02	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		7720	μMHOS/cm	1	0.00

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11920	Date Analyzed:	2004-08-02	Analyzed By:	MK
Prep Batch:	10537	Date Prepared:	2004-08-02	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		10100	μMHOS/cm	1	0.00

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11920	Date Analyzed:	2004-08-02	Analyzed By:	MK
Prep Batch:	10537	Date Prepared:	2004-08-02	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		5480	μMHOS/cm	1	0.00

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11920	Date Analyzed:	2004-08-02	Analyzed By:	MK
Prep Batch:	10537	Date Prepared:	2004-08-02	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		13300	μMHOS/cm	1	0.00

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12024	Date Analyzed:	2004-08-12	Analyzed By:	MK
Prep Batch:	10626	Date Prepared:	2004-08-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		18300	μMHOS/cm	1	0.00

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12024	Date Analyzed:	2004-08-12	Analyzed By:	MK

Prep Batch: 10626 Date Prepared: 2004-08-12 Prepared By: MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		16300	μMHOS/cm	1	0.00

Method Blank (1) QC Batch: 11331

Parameter	Flag	Result	Units	RL
Specific Conductance		$<$ 1.00	μMHOS/cm	

Method Blank (1) QC Batch: 11920

Parameter	Flag	Result	Units	RL
Specific Conductance		$<$ 1.00	μMHOS/cm	

Method Blank (1) QC Batch: 12024

Parameter	Flag	Result	Units	RL
Specific Conductance		$<$ 1.00	μMHOS/cm	

Duplicate (1) QC Batch: 11331

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	35200	35200	μMHOS/cm	1	0	6.7

Duplicate (1) QC Batch: 11920

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	10100	10100	μMHOS/cm	1	0	6.7

Duplicate (1) QC Batch: 12024

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	18300	18300	μMHOS/cm	1	0	6.7

Standard (ICV-1) QC Batch: 11331

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1420	101	90 - 110	2004-07-23

Standard (CCV-1) QC Batch: 11331

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1400	99	90 - 110	2004-07-23

Standard (ICV-1) QC Batch: 11920

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1400	99	90 - 110	2004-08-02

Standard (CCV-1) QC Batch: 11920

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1440	102	90 - 110	2004-08-02

Standard (ICV-1) QC Batch: 12024

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1400	99	90 - 110	2004-08-12

Standard (CCV-1) QC Batch: 12024

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1400	99	90 - 110	2004-08-12

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11330	Date Analyzed:	2004-07-23	Analyzed By:	JR
Prep Batch:	10009	Date Prepared:	2004-07-23	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0230	mg/L	1	0.0100

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11330	Date Analyzed:	2004-07-23	Analyzed By:	JR
Prep Batch:	10009	Date Prepared:	2004-07-23	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		1.46	mg/L	5	0.0100

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11561	Date Analyzed:	2004-07-27	Analyzed By:	JR
Prep Batch:	10213	Date Prepared:	2004-07-27	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.220	mg/L	1	0.0100

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11562	Date Analyzed:	2004-07-28	Analyzed By:	JR
Prep Batch:	10215	Date Prepared:	2004-07-28	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11568	Date Analyzed:	2004-07-30	Analyzed By:	JR
Prep Batch:	10228	Date Prepared:	2004-07-30	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11568	Date Analyzed:	2004-07-30	Analyzed By:	JR
Prep Batch:	10228	Date Prepared:	2004-07-30	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11565	Date Analyzed:	2004-07-29	Analyzed By:	JR
Prep Batch:	10221	Date Prepared:	2004-07-29	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11565	Date Analyzed:	2004-07-29	Analyzed By:	JR
Prep Batch:	10221	Date Prepared:	2004-07-29	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0360	mg/L	1	0.0100

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11596	Date Analyzed:	2004-08-03	Analyzed By:	JR
Prep Batch:	10243	Date Prepared:	2004-08-03	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.305	mg/L	1	0.0100

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11596	Date Analyzed:	2004-08-03	Analyzed By:	JR

Prep Batch: 10243 Date Prepared: 2004-08-03 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.300	mg/L	1	0.0100

Method Blank (1) QC Batch: 11330

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11561

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11562

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11565

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11568

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11596

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Laboratory Control Spike (LCS-1) QC Batch: 11330

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.499	0.498	mg/L	1	0.500	<0.00500	100	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11561

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.497	0.495	mg/L	1	0.500	<0.00500	99	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11562

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.498	0.520	mg/L	1	0.500	<0.00500	100	4	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11565

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.496	0.494	mg/L	1	0.500	<0.00500	99	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11568

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.505	0.508	mg/L	1	0.500	<0.00500	101	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11596

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.496	0.498	mg/L	1	0.500	<0.00500	99	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11330

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.570	0.586	mg/L	1.11	0.500	0.023	98	3	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11561

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.789	0.780	mg/L	1.11	0.500	0.22	102	1	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11562

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.586	0.589	mg/L	1.11	0.500	<0.00555	106	0	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11565

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.622	0.614	mg/L	1.11	0.500	0.036	106	1	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11568

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.592	0.592	mg/L	1.11	0.500	<0.00555	107	0	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11596

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.858	0.864	mg/L	1.11	0.500	0.305	100	1	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11330

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.507	101	80 - 120	2004-07-23

Standard (CCV-1) QC Batch: 11330

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.516	103	80 - 120	2004-07-23

Standard (ICV-1) QC Batch: 11561

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.515	103	80 - 120	2004-07-27

Standard (CCV-1) QC Batch: 11561

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.494	99	80 - 120	2004-07-27

Standard (ICV-1) QC Batch: 11562

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.508	102	80 - 120	2004-07-28

Standard (CCV-1) QC Batch: 11562

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.499	100	80 - 120	2004-07-28

Standard (ICV-1) QC Batch: 11565

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.506	101	80 - 120	2004-07-29

Standard (CCV-1) QC Batch: 11565

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.495	99	80 - 120	2004-07-29

Standard (ICV-1) QC Batch: 11568

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.507	101	80 - 120	2004-07-30

Standard (CCV-1) QC Batch: 11568

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.511	102	80 - 120	2004-07-30

Standard (ICV-1) QC Batch: 11596

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.490	98	80 - 120	2004-08-03

Standard (CCV-1) QC Batch: 11596

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.518	104	80 - 120	2004-08-03

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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 24 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		5.31	mg/L	1	0.00500
Dissolved Barium		0.0220	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		1.38	mg/L	1	0.0500
Dissolved Nickel		<0.00500	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		0.263	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		9.86	mg/L	1	0.00500
Dissolved Vanadium		<0.00500	mg/L	1	0.00500
Dissolved Zinc		<0.0100	mg/L	1	0.0100
Dissolved Silica		13.1	mg/L	1	0.0500

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.76	mg/L	1	0.00500

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500

continued . . .

sample 39704 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		2.98	mg/L	1	0.00500
Dissolved Barium		0.0120	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		1.30	mg/L	1	0.00500
Dissolved Copper		0.0280	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.467	mg/L	1	0.0500
Dissolved Nickel		0.0110	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		0.199	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		9.22	mg/L	1	0.00500
Dissolved Vanadium		0.0240	mg/L	1	0.00500
Dissolved Zinc		<0.0100	mg/L	1	0.0100
Dissolved Silica		32.5	mg/L	1	0.0500

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.53	mg/L	1	0.00500

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		5.54	mg/L	1	0.00500
Dissolved Barium		<0.0100	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		0.210	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125

continued . . .

sample 39870 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.395	mg/L	1	0.0500
Dissolved Nickel		<0.00500	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		6.94	mg/L	1	0.00500
Dissolved Vanadium		<0.00500	mg/L	1	0.00500
Dissolved Zinc		0.0210	mg/L	1	0.0100
Dissolved Silica		35.9	mg/L	1	0.0500

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.977	mg/L	1	0.00500

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		5.02	mg/L	1	0.00500
Dissolved Barium		0.0140	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		0.0350	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.282	mg/L	1	0.0500
Dissolved Nickel		0.00900	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		5.24	mg/L	1	0.00500

continued . . .

sample 39918 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Vanadium		0.0220	mg/L	1	0.00500
Dissolved Zinc		0.0130	mg/L	1	0.0100
Dissolved Silica		32.0	mg/L	1	0.0500

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.908	mg/L	1	0.00500

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11721	Date Analyzed:	2004-08-09	Analyzed By:	RR
Prep Batch:	10292	Date Prepared:	2004-08-04	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		3.43	mg/L	1	0.00500
Dissolved Barium		0.0190	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.219	mg/L	1	0.0500
Dissolved Nickel		<0.00500	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		8.65	mg/L	1	0.00500
Dissolved Vanadium		0.0260	mg/L	1	0.00500
Dissolved Zinc		0.0290	mg/L	1	0.0100
Dissolved Silica		24.5	mg/L	1	0.0500

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A

QC Batch:	11721	Date Analyzed:	2004-08-09	Analyzed By:	RR
Prep Batch:	10292	Date Prepared:	2004-08-04	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.970	mg/L	1	0.00500

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11721	Date Analyzed:	2004-08-09	Analyzed By:	RR
Prep Batch:	10292	Date Prepared:	2004-08-04	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		8.26	mg/L	1	0.00500
Dissolved Barium		0.0320	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.146	mg/L	1	0.0500
Dissolved Manganese		0.597	mg/L	1	0.0250
Dissolved Molybdenum		0.267	mg/L	1	0.0500
Dissolved Nickel		<0.00500	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		9.95	mg/L	1	0.00500
Dissolved Vanadium		0.00700	mg/L	1	0.00500
Dissolved Zinc		0.0140	mg/L	1	0.0100
Dissolved Silica		24.2	mg/L	1	0.0500

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11721	Date Analyzed:	2004-08-09	Analyzed By:	RR
Prep Batch:	10292	Date Prepared:	2004-08-04	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.58	mg/L	1	0.00500

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11721	Date Analyzed:	2004-08-09	Analyzed By:	RR

Prep Batch: 10292 Date Prepared: 2004-08-04 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		3.13	mg/L	1	0.00500
Dissolved Barium		0.0160	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		0.0310	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		0.195	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.388	mg/L	1	0.0500
Dissolved Nickel		0.218	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		8.05	mg/L	1	0.00500
Dissolved Vanadium		<0.00500	mg/L	1	0.00500
Dissolved Zinc		0.176	mg/L	1	0.0100
Dissolved Silica		30.5	mg/L	1	0.0500

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis: Li, Dissolved Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 11721 Date Analyzed: 2004-08-09 Analyzed By: RR
Prep Batch: 10292 Date Prepared: 2004-08-04 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.654	mg/L	1	0.00500

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis: Dissolved Metals Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 11735 Date Analyzed: 2004-08-09 Analyzed By: RR
Prep Batch: 10292 Date Prepared: 2004-08-04 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		5.80	mg/L	1	0.00500
Dissolved Barium		0.0150	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500

continued . . .

sample 40254 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Chromium		0.0310	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.0720	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.531	mg/L	1	0.0500
Dissolved Nickel		0.0300	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		5.88	mg/L	1	0.00500
Dissolved Vanadium		0.0360	mg/L	1	0.00500
Dissolved Zinc		0.0180	mg/L	1	0.0100
Dissolved Silica		33.9	mg/L	1	0.0500

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11735	Date Analyzed:	2004-08-09	Analyzed By:	RR
Prep Batch:	10292	Date Prepared:	2004-08-04	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.14	mg/L	1	0.00500

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		6.54	mg/L	1	0.00500
Dissolved Barium		0.0130	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		0.276	mg/L	1	0.00500
Dissolved Copper		0.0170	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.873	mg/L	1	0.0500
Dissolved Nickel		<0.00500	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100

continued . . .

sample 40388 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		6.75	mg/L	1	0.00500
Dissolved Vanadium		0.0360	mg/L	1	0.00500
Dissolved Zinc		0.0160	mg/L	1	0.0100
Dissolved Silica		32.7	mg/L	1	0.0500

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.15	mg/L	1	0.00500

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		6.53	mg/L	1	0.00500
Dissolved Barium		0.0130	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		0.281	mg/L	1	0.00500
Dissolved Copper		0.0160	mg/L	1	0.0125
Dissolved Iron		1.69	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.875	mg/L	1	0.0500
Dissolved Nickel		<0.00500	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		6.62	mg/L	1	0.00500
Dissolved Vanadium		0.0360	mg/L	1	0.00500
Dissolved Zinc		0.0130	mg/L	1	0.0100
Dissolved Silica		32.8	mg/L	1	0.0500

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.13	mg/L	1	0.00500

Method Blank (1) QC Batch: 11448

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 11448

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.00300	mg/L	0.003
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.00500	mg/L	0.005
Dissolved Boron		<0.00500	mg/L	0.005
Dissolved Barium		<0.0100	mg/L	0.01
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00100	mg/L	0.001
Dissolved Cobalt		<0.00500	mg/L	0.005
Dissolved Chromium		<0.00500	mg/L	0.005
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.00500	mg/L	0.005
Dissolved Lead		<0.00500	mg/L	0.005
Dissolved Selenium		<0.0100	mg/L	0.01
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.00500	mg/L	0.005
Dissolved Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11721

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 11721

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.00300	mg/L	0.003
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.00500	mg/L	0.005
Dissolved Boron		<0.00500	mg/L	0.005
Dissolved Barium		<0.0100	mg/L	0.01
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00100	mg/L	0.001
Dissolved Cobalt		<0.00500	mg/L	0.005
Dissolved Chromium		<0.00500	mg/L	0.005
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.00500	mg/L	0.005
Dissolved Lead		<0.00500	mg/L	0.005
Dissolved Selenium		<0.0100	mg/L	0.01
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.00500	mg/L	0.005
Dissolved Zinc		<0.0100	mg/L	0.01
Dissolved Silica		<0.0500	mg/L	0.05

Method Blank (1) QC Batch: 11735

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 11735

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.00300	mg/L	0.003
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.00500	mg/L	0.005
Dissolved Boron		<0.00500	mg/L	0.005
Dissolved Barium		<0.0100	mg/L	0.01
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00100	mg/L	0.001
Dissolved Cobalt		<0.00500	mg/L	0.005
Dissolved Chromium		<0.00500	mg/L	0.005
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.00500	mg/L	0.005
Dissolved Lead		<0.00500	mg/L	0.005
Dissolved Selenium		<0.0100	mg/L	0.01

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.00500	mg/L	0.005
Dissolved Zinc		<0.0100	mg/L	0.01
Dissolved Silica		<0.0500	mg/L	0.05

Method Blank (1) QC Batch: 12318

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 12318

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.00300	mg/L	0.003
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.00500	mg/L	0.005
Dissolved Boron		<0.00500	mg/L	0.005
Dissolved Barium		<0.0100	mg/L	0.01
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00100	mg/L	0.001
Dissolved Cobalt		<0.00500	mg/L	0.005
Dissolved Chromium		<0.00500	mg/L	0.005
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.00500	mg/L	0.005
Dissolved Lead		<0.00500	mg/L	0.005
Dissolved Selenium		<0.0100	mg/L	0.01
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.00500	mg/L	0.005
Dissolved Zinc		<0.0100	mg/L	0.01

Laboratory Control Spike (LCS-1) QC Batch: 11448

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0490	0.0490	mg/L	1	0.0500	<0.000188	98	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11448

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.128	0.126	mg/L	1	0.125	<0.00274	102	2	85 - 115	20
Dissolved Aluminum	0.964	0.947	mg/L	1	1.00	<0.0133	96	2	85 - 115	20
Dissolved Arsenic	0.495	0.504	mg/L	1	0.500	<0.00489	99	2	85 - 115	20
Dissolved Boron	0.0510	0.0510	mg/L	1	0.0500	<0.00544	102	0	85 - 115	20
Dissolved Barium	0.998	1.01	mg/L	1	1.00	<0.000450	100	1	85 - 114	20
Dissolved Beryllium	0.0253	0.0259	mg/L	1	0.0250	<0.000178	101	2	85 - 115	20
Dissolved Cadmium	0.243	0.241	mg/L	1	0.250	<0.00181	97	1	86 - 115	20
Dissolved Cobalt	0.261	0.259	mg/L	1	0.250	<0.00293	104	1	87 - 113	20
Dissolved Chromium	0.103	0.103	mg/L	1	0.100	<0.00357	103	0	85 - 115	20
Dissolved Copper	0.138	0.141	mg/L	1	0.125	<0.00127	110	2	85 - 113	20
Dissolved Iron	0.489	0.486	mg/L	1	0.500	<0.0103	98	1	85 - 115	20
Dissolved Manganese	0.257	0.257	mg/L	1	0.250	<0.000297	103	0	85 - 110	20
Dissolved Molybdenum	0.538	0.526	mg/L	1	0.500	<0.00690	108	2	85 - 115	20
Dissolved Nickel	0.276	0.276	mg/L	1	0.250	<0.000450	110	0	85 - 112	20
Dissolved Lead	0.519	0.498	mg/L	1	0.500	<0.00698	104	4	86.1 - 112	20
Dissolved Selenium	0.436	0.469	mg/L	1	0.500	<0.00556	87	7	75 - 125	20
Dissolved Tin	0.293	0.261	mg/L	1	0.300	<0.00759	98	12	85 - 115	20
Dissolved Strontium	0.0480	0.0480	mg/L	1	0.0500	<0.000281	96	0	85 - 115	20
Dissolved Vanadium	0.257	0.257	mg/L	1	0.250	<0.00105	103	0	85 - 115	20
Dissolved Zinc	0.258	0.256	mg/L	1	0.250	<0.00300	103	1	85 - 115	20
Dissolved Silica	0.459	0.453	mg/L	1	0.500	<0.00490	92	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11721

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0560	0.0560	mg/L	1	0.0500	<0.000188	112	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11721

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.117	0.117	mg/L	1	0.125	<0.00274	94	0	85 - 115	20
Dissolved Aluminum	0.887	0.887	mg/L	1	1.00	<0.0133	89	0	85 - 115	20
Dissolved Arsenic	0.436	0.436	mg/L	1	0.500	<0.00489	87	0	85 - 115	20
Dissolved Boron	0.0460	0.0430	mg/L	1	0.0500	<0.00544	92	7	85 - 115	20
Dissolved Barium	0.920	0.930	mg/L	1	1.00	<0.000450	92	1	85 - 114	20
Dissolved Beryllium	0.0249	0.0242	mg/L	1	0.0250	<0.000178	100	3	85 - 115	20
Dissolved Cadmium	0.227	0.230	mg/L	1	0.250	<0.00181	91	1	86 - 115	20
Dissolved Cobalt	0.239	0.239	mg/L	1	0.250	<0.00293	96	0	87 - 113	20
Dissolved Chromium	0.0920	0.0920	mg/L	1	0.100	<0.00357	92	0	85 - 115	20
Dissolved Copper	0.116	0.116	mg/L	1	0.125	<0.00127	93	0	85 - 113	20
Dissolved Iron	0.444	0.450	mg/L	1	0.500	<0.0103	89	1	85 - 115	20
Dissolved Manganese	0.234	0.236	mg/L	1	0.250	<0.000297	94	1	85 - 110	20
Dissolved Molybdenum	0.462	0.448	mg/L	1	0.500	<0.00690	92	3	85 - 115	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Nickel	0.245	0.244	mg/L	1	0.250	<0.000450	98	0	85 - 112	20
Dissolved Lead	0.440	0.437	mg/L	1	0.500	<0.00698	88	1	86.1 - 112	20
Dissolved Selenium	0.495	0.412	mg/L	1	0.500	<0.00556	99	18	75 - 125	20
Dissolved Tin	0.288	0.289	mg/L	1	0.300	<0.00759	96	0	85 - 115	20
Dissolved Strontium	0.0450	0.0450	mg/L	1	0.0500	<0.000281	90	0	85 - 115	20
Dissolved Vanadium	0.236	0.249	mg/L	1	0.250	<0.00105	94	5	85 - 115	20
Dissolved Zinc	0.234	0.236	mg/L	1	0.250	<0.00300	94	1	85 - 115	20
Dissolved Silica	0.448	0.445	mg/L	1	0.500	<0.00490	90	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11735

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0560	0.0560	mg/L	1	0.0500	<0.000188	112	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11735

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.117	0.117	mg/L	1	0.125	<0.00274	94	0	85 - 115	20
Dissolved Aluminum	0.887	0.887	mg/L	1	1.00	<0.0133	89	0	85 - 115	20
Dissolved Arsenic	0.436	0.436	mg/L	1	0.500	<0.00489	87	0	85 - 115	20
Dissolved Boron	0.0460	0.0430	mg/L	1	0.0500	<0.00544	92	7	85 - 115	20
Dissolved Barium	0.920	0.930	mg/L	1	1.00	<0.000450	92	1	85 - 114	20
Dissolved Beryllium	0.0249	0.0242	mg/L	1	0.0250	<0.000178	100	3	85 - 115	20
Dissolved Cadmium	0.227	0.230	mg/L	1	0.250	<0.00181	91	1	86 - 115	20
Dissolved Cobalt	0.239	0.239	mg/L	1	0.250	<0.00293	96	0	87 - 113	20
Dissolved Chromium	0.0920	0.0920	mg/L	1	0.100	<0.00357	92	0	85 - 115	20
Dissolved Copper	0.116	0.116	mg/L	1	0.125	<0.00127	93	0	85 - 113	20
Dissolved Iron	0.444	0.450	mg/L	1	0.500	<0.0103	89	1	85 - 115	20
Dissolved Manganese	0.234	0.236	mg/L	1	0.250	<0.000297	94	1	85 - 110	20
Dissolved Molybdenum	0.462	0.448	mg/L	1	0.500	<0.00690	92	3	85 - 115	20
Dissolved Nickel	0.245	0.244	mg/L	1	0.250	<0.000450	98	0	85 - 112	20
Dissolved Lead	0.440	0.437	mg/L	1	0.500	<0.00698	88	1	86.1 - 112	20
Dissolved Selenium	0.495	0.412	mg/L	1	0.500	<0.00556	99	18	75 - 125	20
Dissolved Tin	0.288	0.289	mg/L	1	0.300	<0.00759	96	0	85 - 115	20
Dissolved Strontium	0.0450	0.0450	mg/L	1	0.0500	<0.000281	90	0	85 - 115	20
Dissolved Vanadium	0.236	0.249	mg/L	1	0.250	<0.00105	94	5	85 - 115	20
Dissolved Zinc	0.234	0.236	mg/L	1	0.250	<0.00300	94	1	85 - 115	20
Dissolved Silica	0.448	0.445	mg/L	1	0.500	<0.00490	90	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12318

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0490	0.0480	mg/L	1	0.0500	<0.000188	98	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12318

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.133	0.131	mg/L	1	0.125	<0.00274	106	2	85 - 115	20
Dissolved Aluminum	0.979	0.960	mg/L	1	1.00	<0.0133	98	2	85 - 115	20
Dissolved Arsenic	0.524	0.443	mg/L	1	0.500	<0.00489	105	17	85 - 115	20
Dissolved Boron	0.0490	0.0460	mg/L	1	0.0500	<0.00544	98	6	85 - 115	20
Dissolved Barium	0.990	0.972	mg/L	1	1.00	<0.000450	99	2	85 - 114	20
Dissolved Beryllium	0.0258	0.0248	mg/L	1	0.0250	<0.000178	103	4	85 - 115	20
Dissolved Cadmium	0.257	0.253	mg/L	1	0.250	<0.00181	103	2	86 - 115	20
Dissolved Cobalt	0.271	0.275	mg/L	1	0.250	<0.00293	108	1	87 - 113	20
Dissolved Chromium	0.0970	0.0950	mg/L	1	0.100	<0.00357	97	2	85 - 115	20
Dissolved Copper	0.122	0.118	mg/L	1	0.125	<0.00127	98	3	85 - 113	20
Dissolved Iron	0.506	0.498	mg/L	1	0.500	<0.0103	101	2	85 - 115	20
Dissolved Manganese	0.260	0.258	mg/L	1	0.250	<0.000297	104	1	85 - 110	20
Dissolved Molybdenum	0.450	0.456	mg/L	1	0.500	<0.00690	90	1	85 - 115	20
Dissolved Nickel	0.245	0.268	mg/L	1	0.250	<0.000450	98	9	85 - 112	20
Dissolved Lead	0.487	0.508	mg/L	1	0.500	<0.00698	97	4	86.1 - 112	20
Dissolved Selenium	0.410	0.508	mg/L	1	0.500	<0.00556	82	21	75 - 125	20
Dissolved Tin	0.313	0.311	mg/L	1	0.300	<0.00759	104	1	85 - 115	20
Dissolved Strontium	0.0490	0.0480	mg/L	1	0.0500	<0.000281	98	2	85 - 115	20
Dissolved Vanadium	0.260	0.263	mg/L	1	0.250	<0.00105	104	1	85 - 115	20
Dissolved Zinc	0.246	0.274	mg/L	1	0.250	<0.00300	98	11	85 - 115	20
Dissolved Silica	0.496	0.470	mg/L	1	0.500	<0.00490	99	5	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11448

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0510	0.0520	mg/L	1	0.0500	<0.000188	102	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11448

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.135	0.135	mg/L	1	0.125	<0.00274	108	0	75 - 125	20
Dissolved Aluminum	0.956	0.961	mg/L	1	1.00	<0.0133	96	0	75 - 125	20
Dissolved Arsenic	0.492	0.483	mg/L	1	0.500	<0.00489	98	2	75 - 125	20
Dissolved Boron	0.0500	0.0510	mg/L	1	0.0500	<0.00544	100	2	75 - 125	20
Dissolved Barium	1.07	1.06	mg/L	1	1.00	<0.000450	107	1	75 - 125	20
Dissolved Beryllium	0.0245	0.0250	mg/L	1	0.0250	<0.000178	98	2	75 - 125	20
Dissolved Cadmium	0.257	0.256	mg/L	1	0.250	<0.00181	103	0	75 - 125	20

continued . . .

matrix spikes continued . . .

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Cobalt	0.247	0.250	mg/L	1	0.250	<0.00293	99	1	75 - 125	20
Dissolved Chromium	0.109	0.108	mg/L	1	0.100	<0.00357	109	1	75 - 125	20
Dissolved Copper	0.138	0.134	mg/L	1	0.125	<0.00127	110	3	75 - 125	20
Dissolved Iron	0.528	0.533	mg/L	1	0.500	<0.0103	106	1	75 - 125	20
Dissolved Manganese	0.276	0.276	mg/L	1	0.250	<0.000297	110	0	75 - 125	20
Dissolved Molybdenum	0.551	0.545	mg/L	1	0.500	<0.00690	110	1	75 - 125	20
Dissolved Nickel	0.302	0.292	mg/L	1	0.250	<0.000450	121	3	75 - 125	20
Dissolved Lead	0.472	0.467	mg/L	1	0.500	<0.00698	94	1	75 - 125	20
Dissolved Selenium	0.519	0.516	mg/L	1	0.500	<0.00556	104	0	75 - 125	20
Dissolved Tin	0.320	0.296	mg/L	1	0.300	<0.00759	107	8	75 - 125	20
Dissolved Strontium	0.0450	0.0470	mg/L	1	0.0500	<0.000281	90	4	75 - 125	20
Dissolved Vanadium	0.257	0.259	mg/L	1	0.250	<0.00105	103	1	75 - 125	20
Dissolved Zinc	0.256	0.254	mg/L	1	0.250	<0.00300	102	1	75 - 125	20
Dissolved Silica	0.571	0.551	mg/L	1	0.500	<0.00490	114	4	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11721

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0460	0.0480	mg/L	1	0.0500	<0.000188	92	4	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11721

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.137	0.139	mg/L	1	0.125	<0.00274	110	1	75 - 125	20
Dissolved Aluminum	1.07	1.06	mg/L	1	1.00	<0.0133	107	1	75 - 125	20
Dissolved Arsenic	0.458	0.502	mg/L	1	0.500	<0.00489	92	9	75 - 125	20
Dissolved Boron	0.0480	0.0500	mg/L	1	0.0500	<0.00544	96	4	75 - 125	20
Dissolved Barium	1.05	1.15	mg/L	1	1.00	<0.000450	105	9	75 - 125	20
Dissolved Beryllium	0.0260	0.0260	mg/L	1	0.0250	<0.000178	104	0	75 - 125	20
Dissolved Cadmium	0.260	0.261	mg/L	1	0.250	<0.00181	104	0	75 - 125	20
Dissolved Cobalt	0.291	0.288	mg/L	1	0.250	<0.00293	116	1	75 - 125	20
Dissolved Chromium	0.110	0.109	mg/L	1	0.100	<0.00357	110	1	75 - 125	20
Dissolved Copper	0.131	0.128	mg/L	1	0.125	<0.00127	105	2	75 - 125	20
Dissolved Iron	0.480	0.528	mg/L	1	0.500	<0.0103	96	10	75 - 125	20
Dissolved Manganese	0.273	0.275	mg/L	1	0.250	<0.000297	109	1	75 - 125	20
Dissolved Molybdenum	0.517	0.520	mg/L	1	0.500	<0.00690	103	0	75 - 125	20
Dissolved Nickel	0.305	0.306	mg/L	1	0.250	<0.000450	122	0	75 - 125	20
Dissolved Lead	0.488	0.493	mg/L	1	0.500	<0.00698	98	1	75 - 125	20
Dissolved Selenium	0.514	0.499	mg/L	1	0.500	<0.00556	103	3	75 - 125	20
Dissolved Tin	0.316	0.321	mg/L	1	0.300	<0.00759	105	2	75 - 125	20
Dissolved Strontium	0.0480	0.0460	mg/L	1	0.0500	<0.000281	96	4	75 - 125	20
Dissolved Vanadium	0.288	0.290	mg/L	1	0.250	<0.00105	115	1	75 - 125	20
Dissolved Zinc	0.257	0.261	mg/L	1	0.250	<0.00300	103	2	75 - 125	20
Dissolved Silica	0.506	0.510	mg/L	1	0.500	<0.00490	101	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11735

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0460	0.0480	mg/L	1	0.0500	<0.000188	92	4	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11735

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.137	0.139	mg/L	1	0.125	<0.00274	110	1	75 - 125	20
Dissolved Aluminum	1.07	1.06	mg/L	1	1.00	<0.0133	107	1	75 - 125	20
Dissolved Arsenic	0.458	0.502	mg/L	1	0.500	<0.00489	92	9	75 - 125	20
Dissolved Boron	0.0480	0.0500	mg/L	1	0.0500	<0.00544	96	4	75 - 125	20
Dissolved Barium	1.05	1.15	mg/L	1	1.00	<0.000450	105	9	75 - 125	20
Dissolved Beryllium	0.0260	0.0260	mg/L	1	0.0250	<0.000178	104	0	75 - 125	20
Dissolved Cadmium	0.260	0.261	mg/L	1	0.250	<0.00181	104	0	75 - 125	20
Dissolved Cobalt	0.291	0.288	mg/L	1	0.250	<0.00293	116	1	75 - 125	20
Dissolved Chromium	0.110	0.109	mg/L	1	0.100	<0.00357	110	1	75 - 125	20
Dissolved Copper	0.131	0.128	mg/L	1	0.125	<0.00127	105	2	75 - 125	20
Dissolved Iron	0.480	0.528	mg/L	1	0.500	<0.0103	96	10	75 - 125	20
Dissolved Manganese	0.273	0.275	mg/L	1	0.250	<0.000297	109	1	75 - 125	20
Dissolved Molybdenum	0.517	0.520	mg/L	1	0.500	<0.00690	103	0	75 - 125	20
Dissolved Nickel	0.305	0.306	mg/L	1	0.250	<0.000450	122	0	75 - 125	20
Dissolved Lead	0.488	0.493	mg/L	1	0.500	<0.00698	98	1	75 - 125	20
Dissolved Selenium	0.514	0.499	mg/L	1	0.500	<0.00556	103	3	75 - 125	20
Dissolved Tin	0.316	0.321	mg/L	1	0.300	<0.00759	105	2	75 - 125	20
Dissolved Strontium	0.0480	0.0460	mg/L	1	0.0500	<0.000281	96	4	75 - 125	20
Dissolved Vanadium	0.288	0.290	mg/L	1	0.250	<0.00105	115	1	75 - 125	20
Dissolved Zinc	0.257	0.261	mg/L	1	0.250	<0.00300	103	2	75 - 125	20
Dissolved Silica	0.506	0.510	mg/L	1	0.500	<0.00490	101	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12318

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium [12]	1.34	1.33	mg/L	1	0.0500	1.15	380	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12318

continued . . .

[1]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[2]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	[3][4]	0.198	0.194	mg/L	1	0.125	<0.00274	158	2	75 - 125	20
Dissolved Aluminum	[5][6]	2.02	2.02	mg/L	1	1.00	<0.0133	202	0	75 - 125	20
Dissolved Arsenic		0.572	0.482	mg/L	1	0.500	<0.00489	114	17	75 - 125	20
Dissolved Boron	[7][8]	6.94	6.80	mg/L	1	0.0500	6.54	800	2	75 - 125	20
Dissolved Barium	[9][10]	1.33	1.30	mg/L	1	1.00	0.013	132	2	75 - 125	20
Dissolved Beryllium	[11]	0.0278	0.0320	mg/L	1	0.0250	<0.000178	111	14	75 - 125	20
Dissolved Cadmium		0.259	0.254	mg/L	1	0.250	<0.00181	104	2	75 - 125	20
Dissolved Cobalt		0.308	0.306	mg/L	1	0.250	<0.00293	123	1	75 - 125	20
Dissolved Chromium		0.401	0.397	mg/L	1	0.100	0.276	125	1	75 - 125	20
Dissolved Copper	[12][13]	0.243	0.238	mg/L	1	0.125	0.017	181	2	75 - 125	20
Dissolved Iron		0.535	0.526	mg/L	1	0.500	<0.0103	107	2	75 - 125	20
Dissolved Manganese		0.275	0.272	mg/L	1	0.250	<0.000297	110	1	75 - 125	20
Dissolved Molybdenum		1.44	1.42	mg/L	1	0.500	0.873	113	1	75 - 125	20
Dissolved Nickel		0.305	0.308	mg/L	1	0.250	<0.000450	122	1	75 - 125	20
Dissolved Lead	[14][15]	0.683	0.631	mg/L	1	0.500	<0.00698	137	8	75 - 125	20
Dissolved Selenium		0.527	0.508	mg/L	1	0.500	<0.00556	105	4	75 - 125	20
Dissolved Tin		0.253	0.283	mg/L	1	0.300	<0.00759	84	11	75 - 125	20
Dissolved Strontium	[16][17]	7.05	6.91	mg/L	1	0.0500	6.75	600	2	75 - 125	20
Dissolved Vanadium		0.305	0.299	mg/L	1	0.250	0.036	108	2	75 - 125	20
Dissolved Zinc		0.310	0.309	mg/L	1	0.250	0.016	118	0	75 - 125	20
Dissolved Silica	[18][19]	35.4	34.8	mg/L	1	0.500	32.7	540	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11448

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.964	96	90 - 110	2004-07-29

Standard (ICV-1) QC Batch: 11448

[3]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[4]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[5]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[6]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[7]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[8]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control..
[9]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[10]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[11]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[12]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[13]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[14]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[15]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[16]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[17]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[18]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[19]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.118	94	90 - 110	2004-07-29
Dissolved Aluminum		mg/L	1.00	0.955	96	90 - 110	2004-07-29
Dissolved Arsenic		mg/L	1.00	0.961	96	90 - 110	2004-07-29
Dissolved Boron		mg/L	1.00	0.977	98	90 - 110	2004-07-29
Dissolved Barium		mg/L	1.00	0.950	95	90 - 110	2004-07-29
Dissolved Beryllium		mg/L	1.00	0.965	96	90 - 110	2004-07-29
Dissolved Cadmium		mg/L	1.00	0.955	96	95 - 105	2004-07-29
Dissolved Cobalt		mg/L	1.00	0.932	93	90 - 110	2004-07-29
Dissolved Chromium		mg/L	1.00	0.966	97	90 - 110	2004-07-29
Dissolved Copper		mg/L	1.00	0.975	98	90 - 110	2004-07-29
Dissolved Iron		mg/L	1.00	0.957	96	90 - 110	2004-07-29
Dissolved Manganese		mg/L	1.00	0.940	94	90 - 110	2004-07-29
Dissolved Molybdenum		mg/L	1.00	0.995	100	90 - 110	2004-07-29
Dissolved Nickel		mg/L	1.00	0.935	94	90 - 110	2004-07-29
Dissolved Lead		mg/L	1.00	0.955	96	90 - 110	2004-07-29
Dissolved Selenium		mg/L	1.00	0.957	96	95 - 105	2004-07-29
Dissolved Tin		mg/L	1.00	0.921	92	90 - 110	2004-07-29
Dissolved Strontium		mg/L	1.00	0.958	96	95 - 105	2004-07-29
Dissolved Vanadium		mg/L	1.00	0.985	98	95 - 105	2004-07-29
Dissolved Zinc		mg/L	1.00	0.948	95	90 - 110	2004-07-29
Dissolved Silica		mg/L	5.00	4.94	99	95 - 105	2004-07-29

Standard (CCV-1) QC Batch: 11448

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.975	98	90 - 110	2004-07-29

Standard (CCV-1) QC Batch: 11448

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.121	97	90 - 110	2004-07-29
Dissolved Aluminum		mg/L	1.00	0.950	95	90 - 110	2004-07-29
Dissolved Arsenic		mg/L	1.00	0.982	98	90 - 110	2004-07-29
Dissolved Boron		mg/L	1.00	0.987	99	90 - 110	2004-07-29
Dissolved Barium		mg/L	1.00	0.982	98	90 - 110	2004-07-29
Dissolved Beryllium		mg/L	1.00	0.980	98	90 - 110	2004-07-29
Dissolved Cadmium		mg/L	1.00	0.991	99	90 - 110	2004-07-29
Dissolved Cobalt		mg/L	1.00	0.984	98	90 - 110	2004-07-29
Dissolved Chromium		mg/L	1.00	1.00	100	90 - 110	2004-07-29
Dissolved Copper		mg/L	1.00	0.972	97	90 - 110	2004-07-29
Dissolved Iron		mg/L	1.00	0.990	99	90 - 110	2004-07-29
Dissolved Manganese		mg/L	1.00	0.979	98	90 - 110	2004-07-29
Dissolved Molybdenum		mg/L	1.00	1.03	103	90 - 110	2004-07-29
Dissolved Nickel		mg/L	1.00	0.978	98	90 - 110	2004-07-29
Dissolved Lead		mg/L	1.00	0.997	100	90 - 110	2004-07-29
Dissolved Selenium		mg/L	1.00	0.965	96	90 - 110	2004-07-29

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Tin		mg/L	1.00	0.937	94	90 - 110	2004-07-29
Dissolved Strontium		mg/L	1.00	0.983	98	90 - 110	2004-07-29
Dissolved Vanadium		mg/L	1.00	0.968	97	90 - 110	2004-07-29
Dissolved Zinc		mg/L	1.00	0.970	97	90 - 110	2004-07-29
Dissolved Silica		mg/L	5.00	4.93	99	90 - 110	2004-07-29

Standard (ICV-1) QC Batch: 11721

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.01	101	90 - 110	2004-08-09

Standard (ICV-1) QC Batch: 11721

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.122	98	90 - 110	2004-08-09
Dissolved Aluminum		mg/L	1.00	0.993	99	90 - 110	2004-08-09
Dissolved Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Dissolved Boron		mg/L	1.00	1.00	100	90 - 110	2004-08-09
Dissolved Barium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Dissolved Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Dissolved Cadmium		mg/L	1.00	1.01	101	95 - 105	2004-08-09
Dissolved Cobalt		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Dissolved Chromium		mg/L	1.00	1.02	102	90 - 110	2004-08-09
Dissolved Copper		mg/L	1.00	1.00	100	90 - 110	2004-08-09
Dissolved Iron		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Dissolved Manganese		mg/L	1.00	0.999	100	90 - 110	2004-08-09
Dissolved Molybdenum		mg/L	1.00	1.03	103	90 - 110	2004-08-09
Dissolved Nickel		mg/L	1.00	0.994	99	90 - 110	2004-08-09
Dissolved Lead		mg/L	1.00	1.00	100	90 - 110	2004-08-09
Dissolved Selenium		mg/L	1.00	0.954	95	95 - 105	2004-08-09
Dissolved Tin		mg/L	1.00	0.980	98	90 - 110	2004-08-09
Dissolved Strontium		mg/L	1.00	1.00	100	95 - 105	2004-08-09
Dissolved Vanadium		mg/L	1.00	1.04	104	95 - 105	2004-08-09
Dissolved Zinc		mg/L	1.00	0.987	99	90 - 110	2004-08-09
Dissolved Silica		mg/L	5.00	4.99	100	95 - 105	2004-08-09

Standard (CCV-1) QC Batch: 11721

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.00	100	90 - 110	2004-08-09

Standard (CCV-1) QC Batch: 11721

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.119	95	90 - 110	2004-08-09
Dissolved Aluminum		mg/L	1.00	0.983	98	90 - 110	2004-08-09
Dissolved Arsenic		mg/L	1.00	0.902	90	90 - 110	2004-08-09
Dissolved Boron		mg/L	1.00	0.955	96	90 - 110	2004-08-09
Dissolved Barium		mg/L	1.00	0.989	99	90 - 110	2004-08-09
Dissolved Beryllium		mg/L	1.00	0.966	97	90 - 110	2004-08-09
Dissolved Cadmium		mg/L	1.00	0.929	93	90 - 110	2004-08-09
Dissolved Cobalt		mg/L	1.00	0.947	95	90 - 110	2004-08-09
Dissolved Chromium		mg/L	1.00	0.970	97	90 - 110	2004-08-09
Dissolved Copper		mg/L	1.00	0.966	97	90 - 110	2004-08-09
Dissolved Iron		mg/L	1.00	0.957	96	90 - 110	2004-08-09
Dissolved Manganese		mg/L	1.00	0.945	94	90 - 110	2004-08-09
Dissolved Molybdenum		mg/L	1.00	0.945	94	90 - 110	2004-08-09
Dissolved Nickel		mg/L	1.00	0.942	94	90 - 110	2004-08-09
Dissolved Lead		mg/L	1.00	0.938	94	90 - 110	2004-08-09
Dissolved Selenium		mg/L	1.00	0.941	94	90 - 110	2004-08-09
Dissolved Tin		mg/L	1.00	0.910	91	90 - 110	2004-08-09
Dissolved Strontium		mg/L	1.00	0.972	97	90 - 110	2004-08-09
Dissolved Vanadium		mg/L	1.00	0.994	99	90 - 110	2004-08-09
Dissolved Zinc		mg/L	1.00	0.944	94	90 - 110	2004-08-09
Dissolved Silica		mg/L	5.00	4.88	98	90 - 110	2004-08-09

Standard (ICV-1) QC Batch: 11735

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.01	101	90 - 110	2004-08-09

Standard (ICV-1) QC Batch: 11735

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.122	98	90 - 110	2004-08-09
Dissolved Aluminum		mg/L	1.00	0.993	99	90 - 110	2004-08-09
Dissolved Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Dissolved Boron		mg/L	1.00	1.00	100	90 - 110	2004-08-09
Dissolved Barium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Dissolved Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Dissolved Cadmium		mg/L	1.00	1.01	101	95 - 105	2004-08-09
Dissolved Cobalt		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Dissolved Chromium		mg/L	1.00	1.02	102	90 - 110	2004-08-09
Dissolved Copper		mg/L	1.00	1.00	100	90 - 110	2004-08-09
Dissolved Iron		mg/L	1.00	1.00	100	90 - 110	2004-08-09
Dissolved Manganese		mg/L	1.00	0.999	100	90 - 110	2004-08-09
Dissolved Molybdenum		mg/L	1.00	1.03	103	90 - 110	2004-08-09
Dissolved Nickel		mg/L	1.00	0.994	99	90 - 110	2004-08-09
Dissolved Lead		mg/L	1.00	1.00	100	90 - 110	2004-08-09
Dissolved Selenium		mg/L	1.00	0.954	95	95 - 105	2004-08-09

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Tin		mg/L	1.00	0.980	98	90 - 110	2004-08-09
Dissolved Strontium		mg/L	1.00	1.00	100	95 - 105	2004-08-09
Dissolved Vanadium		mg/L	1.00	1.04	104	95 - 105	2004-08-09
Dissolved Zinc		mg/L	1.00	0.987	99	90 - 110	2004-08-09
Dissolved Silica		mg/L	5.00	4.99	100	95 - 105	2004-08-09

Standard (CCV-1) QC Batch: 11735

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.00	100	90 - 110	2004-08-09

Standard (CCV-1) QC Batch: 11735

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.119	95	90 - 110	2004-08-09
Dissolved Aluminum		mg/L	1.00	0.977	98	90 - 110	2004-08-09
Dissolved Arsenic		mg/L	1.00	0.946	95	90 - 110	2004-08-09
Dissolved Boron		mg/L	1.00	0.955	96	90 - 110	2004-08-09
Dissolved Barium		mg/L	1.00	0.989	99	90 - 110	2004-08-09
Dissolved Beryllium		mg/L	1.00	0.966	97	90 - 110	2004-08-09
Dissolved Cadmium		mg/L	1.00	0.929	93	90 - 110	2004-08-09
Dissolved Cobalt		mg/L	1.00	0.947	95	90 - 110	2004-08-09
Dissolved Chromium		mg/L	1.00	0.970	97	90 - 110	2004-08-09
Dissolved Copper		mg/L	1.00	0.966	97	90 - 110	2004-08-09
Dissolved Iron		mg/L	1.00	0.957	96	90 - 110	2004-08-09
Dissolved Manganese		mg/L	1.00	0.945	94	90 - 110	2004-08-09
Dissolved Molybdenum		mg/L	1.00	0.945	94	90 - 110	2004-08-09
Dissolved Nickel		mg/L	1.00	0.942	94	90 - 110	2004-08-09
Dissolved Lead		mg/L	1.00	0.938	94	90 - 110	2004-08-09
Dissolved Selenium		mg/L	1.00	0.941	94	90 - 110	2004-08-09
Dissolved Tin		mg/L	1.00	0.910	91	90 - 110	2004-08-09
Dissolved Strontium		mg/L	1.00	0.972	97	90 - 110	2004-08-09
Dissolved Vanadium		mg/L	1.00	0.941	94	90 - 110	2004-08-09
Dissolved Zinc		mg/L	1.00	0.944	94	90 - 110	2004-08-09
Dissolved Silica		mg/L	5.00	4.88	98	90 - 110	2004-08-09

Standard (ICV-1) QC Batch: 12318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.999	100	90 - 110	2004-08-27

Standard (ICV-1) QC Batch: 12318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.127	102	90 - 110	2004-08-27
Dissolved Aluminum		mg/L	1.00	0.992	99	90 - 110	2004-08-27
Dissolved Arsenic		mg/L	1.00	0.996	100	90 - 110	2004-08-27
Dissolved Boron		mg/L	1.00	0.990	99	90 - 110	2004-08-27
Dissolved Barium		mg/L	1.00	1.01	101	90 - 110	2004-08-27
Dissolved Beryllium		mg/L	1.00	0.998	100	90 - 110	2004-08-27
Dissolved Cadmium		mg/L	1.00	1.01	101	95 - 105	2004-08-27
Dissolved Cobalt		mg/L	1.00	1.00	100	90 - 110	2004-08-27
Dissolved Chromium		mg/L	1.00	1.05	105	90 - 110	2004-08-27
Dissolved Copper		mg/L	1.00	0.999	100	90 - 110	2004-08-27
Dissolved Iron		mg/L	1.00	1.02	102	90 - 110	2004-08-27
Dissolved Manganese		mg/L	1.00	1.01	101	90 - 110	2004-08-27
Dissolved Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-08-27
Dissolved Nickel		mg/L	1.00	1.01	101	90 - 110	2004-08-27
Dissolved Lead		mg/L	1.00	1.04	104	90 - 110	2004-08-27
Dissolved Selenium		mg/L	1.00	0.961	96	95 - 105	2004-08-27
Dissolved Tin		mg/L	1.00	1.05	105	90 - 110	2004-08-27
Dissolved Strontium		mg/L	1.00	1.02	102	95 - 105	2004-08-27
Dissolved Vanadium		mg/L	1.00	0.999	100	95 - 105	2004-08-27
Dissolved Zinc		mg/L	1.00	0.980	98	90 - 110	2004-08-27
Dissolved Silica		mg/L	5.00	4.95	99	95 - 105	2004-08-27

Standard (CCV-1) QC Batch: 12318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.00	100	90 - 110	2004-08-27

Standard (CCV-1) QC Batch: 12318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.126	101	90 - 110	2004-08-27
Dissolved Aluminum		mg/L	1.00	0.984	98	90 - 110	2004-08-27
Dissolved Arsenic		mg/L	1.00	0.986	99	90 - 110	2004-08-27
Dissolved Boron		mg/L	1.00	1.03	103	90 - 110	2004-08-27
Dissolved Barium		mg/L	1.00	0.973	97	90 - 110	2004-08-27
Dissolved Beryllium		mg/L	1.00	1.02	102	90 - 110	2004-08-27
Dissolved Cadmium		mg/L	1.00	0.990	99	90 - 110	2004-08-27
Dissolved Cobalt		mg/L	1.00	0.988	99	90 - 110	2004-08-27
Dissolved Chromium		mg/L	1.00	1.02	102	90 - 110	2004-08-27
Dissolved Copper		mg/L	1.00	1.01	101	90 - 110	2004-08-27
Dissolved Iron		mg/L	1.00	1.00	100	90 - 110	2004-08-27
Dissolved Manganese		mg/L	1.00	0.983	98	90 - 110	2004-08-27
Dissolved Molybdenum		mg/L	1.00	0.946	95	90 - 110	2004-08-27
Dissolved Nickel		mg/L	1.00	0.973	97	90 - 110	2004-08-27
Dissolved Lead		mg/L	1.00	0.969	97	90 - 110	2004-08-27
Dissolved Selenium		mg/L	1.00	0.997	100	90 - 110	2004-08-27

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Tin		mg/L	1.00	0.942	94	90 - 110	2004-08-27
Dissolved Strontium		mg/L	1.00	0.986	99	90 - 110	2004-08-27
Dissolved Vanadium		mg/L	1.00	0.975	98	90 - 110	2004-08-27
Dissolved Zinc		mg/L	1.00	0.973	97	90 - 110	2004-08-27
Dissolved Silica		mg/L	5.00	5.26	105	90 - 110	2004-08-27

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11362	Date Analyzed:	2004-07-26	Analyzed By:	DS
Prep Batch:	10046	Date Prepared:	2004-07-26	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[1]	0.706	μg/L	1	2.50	28	35.8 - 121

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11362	Date Analyzed:	2004-07-26	Analyzed By:	DS
Prep Batch:	10046	Date Prepared:	2004-07-26	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		0.981	μg/L	1	2.50	39	35.8 - 121

[1]Surrogate recovery out of range due to matrix interference. QC shows process is within control.

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11677	Date Analyzed:	2004-08-03	Analyzed By:	DS
Prep Batch:	10309	Date Prepared:	2004-08-02	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[2]	1.02	μg/L	1	2.50	41	35.8 - 121

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11677	Date Analyzed:	2004-08-03	Analyzed By:	DS
Prep Batch:	10309	Date Prepared:	2004-08-02	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		0.702	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[3]	2.38	μg/L	1	2.50	95	35.8 - 121

Sample: 40248 - HLSF-0143-HMW-013-0704

[2]Unknown peak identified at 4.304 minutes.
[3]Unknown peak identified at 4.303 minutes.

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11677	Date Analyzed:	2004-08-03	Analyzed By:	DS
Prep Batch:	10309	Date Prepared:	2004-08-02	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	µg/L	1	0.500
RDX		<0.500	µg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	µg/L	1	0.500
1,3-Dinitrobenzene		<0.500	µg/L	1	0.500
Tetryl		<0.500	µg/L	1	0.500
Nitrobenzene		<0.500	µg/L	1	0.500
TNT		<0.500	µg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	µg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	µg/L	1	0.500
2-NT		<0.500	µg/L	1	0.500
4-NT		<0.500	µg/L	1	0.500
3-NT		<0.500	µg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[4]	0.993	µg/L	1	2.50	40	35.8 - 121

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11677	Date Analyzed:	2004-08-03	Analyzed By:	DS
Prep Batch:	10309	Date Prepared:	2004-08-02	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		627	µg/L	250	0.500
RDX		<125	µg/L	250	0.500
1,3,5-Trinitrobenzene		<125	µg/L	250	0.500
1,3-Dinitrobenzene		<125	µg/L	250	0.500
Tetryl		<125	µg/L	250	0.500
Nitrobenzene		<125	µg/L	250	0.500
TNT		<125	µg/L	250	0.500
4-amino-DNT / 2-amino-DNT		<125	µg/L	250	0.500
2,6-DNT / 2,4-DNT		<125	µg/L	250	0.500
2-NT		<125	µg/L	250	0.500
4-NT		<125	µg/L	250	0.500
3-NT		<125	µg/L	250	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[5]	4.92	µg/L	250	0.0100	197	35.8 - 121

Sample: 40252 - HLSF-0143-HMW-037-0704

[4]Unknown peak identified at 4.307 minutes.
[5]Surrogate recovery out of range due to peak interference. QC shows process is within control.

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11677	Date Analyzed:	2004-08-03	Analyzed By:	DS
Prep Batch:	10309	Date Prepared:	2004-08-02	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[6]	1.90	μg/L	1	2.50	76	35.8 - 121

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11677	Date Analyzed:	2004-08-03	Analyzed By:	DS
Prep Batch:	10309	Date Prepared:	2004-08-02	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[7]	2.60	μg/L	1	2.50	104	35.8 - 121

Sample: 40388 - HLSF-0143-HMW-039-0804

[6]Unknown peak identified at 4.298 minutes.
[7]Unknown peak identified at 4.306 minutes.

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11865	Date Analyzed:	2004-08-11	Analyzed By:	DS
Prep Batch:	10489	Date Prepared:	2004-08-09	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	µg/L	1	0.500
RDX		<0.500	µg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	µg/L	1	0.500
1,3-Dinitrobenzene		<0.500	µg/L	1	0.500
Tetryl		<0.500	µg/L	1	0.500
Nitrobenzene		<0.500	µg/L	1	0.500
TNT		<0.500	µg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	µg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	µg/L	1	0.500
2-NT		<0.500	µg/L	1	0.500
4-NT		<0.500	µg/L	1	0.500
3-NT		<0.500	µg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[8]	1.84	µg/L	1	2.50	74	35.8 - 121

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11865	Date Analyzed:	2004-08-11	Analyzed By:	DS
Prep Batch:	10489	Date Prepared:	2004-08-09	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	µg/L	1	0.500
RDX		<0.500	µg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	µg/L	1	0.500
1,3-Dinitrobenzene		<0.500	µg/L	1	0.500
Tetryl		<0.500	µg/L	1	0.500
Nitrobenzene		<0.500	µg/L	1	0.500
TNT		<0.500	µg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	µg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	µg/L	1	0.500
2-NT		<0.500	µg/L	1	0.500
4-NT		<0.500	µg/L	1	0.500
3-NT		<0.500	µg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[9]	1.21	µg/L	1	2.50	48	35.8 - 121

Method Blank (1) QC Batch: 11362

[8]Unknown peak detected.
[9]Unknown peak detected.

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.07	μg/L	1	2.50	43	35.8 - 121

Method Blank (1) QC Batch: 11677

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.56	μg/L	1	2.50	62	35.8 - 121

Method Blank (1) QC Batch: 11865

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.76	μg/L	1	2.50	110	35.8 - 121

Laboratory Control Spike (LCS-1) QC Batch: 11362

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.48	2.44	μg/L	1	2.50	<0.196	99	2	52.3 - 129	20
RDX	2.51	2.58	μg/L	1	2.50	<0.364	100	3	65.7 - 117	20
1,3,5-Trinitrobenzene	2.61	2.50	μg/L	1	2.50	<0.114	104	4	30.3 - 141	20
1,3-Dinitrobenzene	2.50	2.55	μg/L	1	2.50	<0.108	100	2	45.9 - 139	20
Tetryl	2.51	2.55	μg/L	1	2.50	<0.200	100	2	49 - 129	20
Nitrobenzene	2.53	2.53	μg/L	1	2.50	<0.0990	101	0	0 - 133	20
TNT	2.58	2.48	μg/L	1	2.50	<0.116	103	4	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.58	2.58	μg/L	1	2.50	<0.146	103	0	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.59	2.58	μg/L	1	2.50	<0.183	104	0	44.8 - 130	20
2-NT	2.50	2.51	μg/L	1	2.50	<0.139	100	0	44.9 - 128	20
4-NT	2.50	2.62	μg/L	1	2.50	<0.0851	100	5	47.8 - 123	20
3-NT	2.71	2.74	μg/L	1	2.50	<0.176	108	1	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.54	2.60	μg/L	1	2.50	102	104	42 - 125

Laboratory Control Spike (LCS-1) QC Batch: 11677

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.68	2.61	μg/L	1	2.50	<0.196	107	3	52.3 - 129	20
RDX	2.66	2.66	μg/L	1	2.50	<0.364	106	0	65.7 - 117	20
1,3,5-Trinitrobenzene	2.75	2.84	μg/L	1	2.50	<0.114	110	3	30.3 - 141	20
1,3-Dinitrobenzene	2.51	2.51	μg/L	1	2.50	<0.108	100	0	45.9 - 139	20
Tetryl	2.49	2.25	μg/L	1	2.50	<0.200	100	10	49 - 129	20
Nitrobenzene	2.72	2.58	μg/L	1	2.50	<0.0990	109	5	0 - 133	20
TNT	2.96	2.97	μg/L	1	2.50	<0.116	118	0	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.71	2.69	μg/L	1	2.50	<0.146	108	1	47.9 - 135	20
2,6-DNT / 2,4-DNT	3.00	2.85	μg/L	1	2.50	<0.183	120	5	44.8 - 130	20
2-NT	2.98	2.79	μg/L	1	2.50	<0.139	119	6	44.9 - 128	20
4-NT	2.81	2.82	μg/L	1	2.50	<0.0851	112	0	47.8 - 123	20
3-NT	2.63	2.66	μg/L	1	2.50	<0.176	105	1	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.43	2.30	μg/L	1	2.50	97	92	42 - 125

Laboratory Control Spike (LCS-1) QC Batch: 11865

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.59	2.56	μg/L	1	2.50	<0.196	104	1	52.3 - 129	20
RDX	2.23	2.58	μg/L	1	2.50	<0.364	89	14	65.7 - 117	20
1,3,5-Trinitrobenzene	3.31	3.36	μg/L	1	2.50	<0.114	132	1	30.3 - 141	20
1,3-Dinitrobenzene	3.00	2.69	μg/L	1	2.50	<0.108	120	11	45.9 - 139	20
Tetryl	1.98	1.98	μg/L	1	2.50	<0.200	79	0	49 - 129	20
Nitrobenzene	2.68	2.69	μg/L	1	2.50	<0.0990	107	0	0 - 133	20
TNT	3.04	3.05	μg/L	1	2.50	<0.116	122	0	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.32	2.25	μg/L	1	2.50	<0.146	93	3	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.51	2.45	μg/L	1	2.50	<0.183	100	2	44.8 - 130	20
2-NT	1.90	1.87	μg/L	1	2.50	<0.139	76	2	44.9 - 128	20
4-NT	1.70	1.88	μg/L	1	2.50	<0.0851	68	10	47.8 - 123	20
3-NT	1.64	1.58	μg/L	1	2.50	<0.176	66	4	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.16	2.18	μg/L	1	2.50	86	87	42 - 125

Matrix Spike (MS-1) QC Batch: 11677

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX		2.26	2.52	μg/L	1	2.50	<0.196	90	11	45 - 120	20
RDX	[10][11]	0.970	1.08	μg/L	1	2.50	<0.364	39	11	44.2 - 103	20
1,3,5-Trinitrobenzene	[12][13]	31.7	32.5	μg/L	1	2.50	<0.114	1268	2	20.9 - 105	20
1,3-Dinitrobenzene		1.75	1.58	μg/L	1	2.50	<0.108	70	10	35.8 - 121	20
Tetryl		1.57	1.34	μg/L	1	2.50	<0.200	63	16	30.6 - 105	20
Nitrobenzene		1.71	1.70	μg/L	1	2.50	<0.0990	68	0	0 - 109	20
TNT		1.84	2.20	μg/L	1	2.50	<0.116	74	18	17.7 - 134	20
4-amino-DNT / 2-amino-DNT		1.82	1.96	μg/L	1	2.50	<0.146	73	7	43.7 - 97.4	20
2,6-DNT / 2,4-DNT		2.80	3.21	μg/L	1	2.50	0.702	84	14	11.1 - 123	20
2-NT		1.24	1.41	μg/L	1	2.50	<0.139	50	13	11.1 - 113	20
4-NT		1.31	1.32	μg/L	1	2.50	<0.0851	52	1	30.2 - 114	20
3-NT	[14][15]	1.12	1.14	μg/L	1	2.50	<0.176	45	2	53.4 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[10] RDX recovery out of range due to matrix effects. QC shows process is within control.
[11] RDX recovery out of range due to matrix effects. QC shows process is within control.
[12] 1,3,5-TNB recovery out of range due to peak interference. QC shows process is within control.
[13] 1,3,5-TNB recovery out of range due to peak interference. QC shows process is within control.
[14] 3-NT recovery out of range due to matrix effects. QC shows process is within control.
[15] 3-NT recovery out of range due to matrix effects. QC shows process is within control.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
1,2-Dinitrobenzene	[16][17]	4.26	4.76	µg/L	1	2.5	170	190	27.9 - 112

Standard (ICV-1) QC Batch: 11362

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	477	95	85 - 115	2004-07-26
RDX		µg/L	500	515	103	85 - 115	2004-07-26
1,3,5-Trinitrobenzene		µg/L	500	478	96	85 - 115	2004-07-26
1,3-Dinitrobenzene		µg/L	500	483	97	85 - 115	2004-07-26
Tetryl		µg/L	500	466	93	85 - 115	2004-07-26
Nitrobenzene		µg/L	500	484	97	85 - 115	2004-07-26
TNT		µg/L	500	487	97	85 - 115	2004-07-26
4-amino-DNT / 2-amino-DNT		µg/L	500	498	100	85 - 115	2004-07-26
2,6-DNT / 2,4-DNT		µg/L	500	506	101	85 - 115	2004-07-26
2-NT		µg/L	500	465	93	85 - 115	2004-07-26
4-NT		µg/L	500	475	95	85 - 115	2004-07-26
3-NT		µg/L	500	485	97	85 - 115	2004-07-26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.45	µg/L	1	2.50	98	85 - 115

Standard (CCV-1) QC Batch: 11362

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	482	96	85 - 115	2004-07-26
RDX		µg/L	500	462	92	85 - 115	2004-07-26
1,3,5-Trinitrobenzene		µg/L	500	538	108	85 - 115	2004-07-26
1,3-Dinitrobenzene		µg/L	500	467	93	85 - 115	2004-07-26
Tetryl		µg/L	500	466	93	85 - 115	2004-07-26
Nitrobenzene		µg/L	500	487	97	85 - 115	2004-07-26
TNT		µg/L	500	457	91	85 - 115	2004-07-26
4-amino-DNT / 2-amino-DNT		µg/L	500	437	87	85 - 115	2004-07-26
2,6-DNT / 2,4-DNT		µg/L	500	443	89	85 - 115	2004-07-26
2-NT		µg/L	500	480	96	85 - 115	2004-07-26
4-NT		µg/L	500	477	95	85 - 115	2004-07-26
3-NT		µg/L	500	516	103	85 - 115	2004-07-26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.36	µg/L	1	2.50	94	85 - 115

Standard (ICV-1) QC Batch: 11677

[16]Surrogate recovery out of range due to peak interference. QC shows process is within control.
[17]Surrogate recovery out of range due to peak interference. QC shows process is within control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	560	112	85 - 115	2004-08-03
RDX		µg/L	500	548	110	85 - 115	2004-08-03
1,3,5-Trinitrobenzene		µg/L	500	521	104	85 - 115	2004-08-03
1,3-Dinitrobenzene		µg/L	500	510	102	85 - 115	2004-08-03
Tetryl		µg/L	500	508	102	85 - 115	2004-08-03
Nitrobenzene		µg/L	500	534	107	85 - 115	2004-08-03
TNT		µg/L	500	488	98	85 - 115	2004-08-03
4-amino-DNT / 2-amino-DNT		µg/L	500	547	109	85 - 115	2004-08-03
2,6-DNT / 2,4-DNT		µg/L	500	553	111	85 - 115	2004-08-03
2-NT		µg/L	500	540	108	85 - 115	2004-08-03
4-NT		µg/L	500	545	109	85 - 115	2004-08-03
3-NT		µg/L	500	447	89	85 - 115	2004-08-03

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.51	µg/L	1	2.50	100	85 - 115

Standard (CCV-1) QC Batch: 11677

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	542	108	85 - 115	2004-08-03
RDX		µg/L	500	452	90	85 - 115	2004-08-03
1,3,5-Trinitrobenzene		µg/L	500	535	107	85 - 115	2004-08-03
1,3-Dinitrobenzene		µg/L	500	552	110	85 - 115	2004-08-03
Tetryl		µg/L	500	440	88	85 - 115	2004-08-03
Nitrobenzene		µg/L	500	523	105	85 - 115	2004-08-03
TNT		µg/L	500	554	111	85 - 115	2004-08-03
4-amino-DNT / 2-amino-DNT		µg/L	500	507	101	85 - 115	2004-08-03
2,6-DNT / 2,4-DNT		µg/L	500	496	99	85 - 115	2004-08-03
2-NT		µg/L	500	552	110	85 - 115	2004-08-03
4-NT		µg/L	500	565	113	85 - 115	2004-08-03
3-NT		µg/L	500	507	101	85 - 115	2004-08-03

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.63	µg/L	1	2.50	105	85 - 115

Standard (ICV-1) QC Batch: 11865

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	521	104	85 - 115	2004-08-11
RDX		µg/L	500	490	98	85 - 115	2004-08-11
1,3,5-Trinitrobenzene		µg/L	500	498	100	85 - 115	2004-08-11
1,3-Dinitrobenzene		µg/L	500	554	111	85 - 115	2004-08-11
Tetryl		µg/L	500	505	101	85 - 115	2004-08-11
Nitrobenzene		µg/L	500	472	94	85 - 115	2004-08-11

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TNT		µg/L	500	549	110	85 - 115	2004-08-11
4-amino-DNT / 2-amino-DNT		µg/L	500	468	94	85 - 115	2004-08-11
2,6-DNT / 2,4-DNT		µg/L	500	514	103	85 - 115	2004-08-11
2-NT		µg/L	500	521	104	85 - 115	2004-08-11
4-NT		µg/L	500	564	113	85 - 115	2004-08-11
3-NT		µg/L	500	441	88	85 - 115	2004-08-11

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.44	µg/L	1	2.50	98	85 - 115

Standard (CCV-1) QC Batch: 11865

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	495	99	85 - 115	2004-08-11
RDX		µg/L	500	464	93	85 - 115	2004-08-11
1,3,5-Trinitrobenzene		µg/L	500	561	112	85 - 115	2004-08-11
1,3-Dinitrobenzene		µg/L	500	555	111	85 - 115	2004-08-11
Tetryl		µg/L	500	442	88	85 - 115	2004-08-11
Nitrobenzene		µg/L	500	456	91	85 - 115	2004-08-11
TNT		µg/L	500	565	113	85 - 115	2004-08-11
4-amino-DNT / 2-amino-DNT		µg/L	500	470	94	85 - 115	2004-08-11
2,6-DNT / 2,4-DNT		µg/L	500	516	103	85 - 115	2004-08-11
2-NT		µg/L	500	513	103	85 - 115	2004-08-11
4-NT		µg/L	500	515	103	85 - 115	2004-08-11
3-NT		µg/L	500	426	85	85 - 115	2004-08-11

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.29	µg/L	1	2.50	92	85 - 115

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	11627	Date Analyzed:	2004-08-04	Analyzed By:	RR
Prep Batch:	10268	Date Prepared:	2004-08-04	Prepared By:	LG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	11627	Date Analyzed:	2004-08-04	Analyzed By:	RR
Prep Batch:	10268	Date Prepared:	2004-08-04	Prepared By:	LG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12352	Date Analyzed:	2004-08-24	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12352	Date Analyzed:	2004-08-24	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12352	Date Analyzed:	2004-08-24	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12352	Date Analyzed:	2004-08-24	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12352	Date Analyzed:	2004-08-24	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12352	Date Analyzed:	2004-08-24	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12352	Date Analyzed:	2004-08-24	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12352	Date Analyzed:	2004-08-24	Analyzed By:	TP

Prep Batch: 10911 Date Prepared: 2004-08-24 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Method Blank (1) QC Batch: 11627

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Method Blank (1) QC Batch: 12352

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Laboratory Control Spike (LCS-1) QC Batch: 11627

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00110	0.00110	mg/L	1	0.00100	<0.0000329	110	0	82 - 120	20
Total Mercury	0.00110	0.00110	mg/L	1	0.00100	<0.0000329	110	0	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12352

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.000970	0.00103	mg/L	1	0.00100	<0.0000329	97	6	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11627

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00108	0.00107	mg/L	1	0.00100	<0.0000329	108	1	80 - 120	20
Total Mercury	0.00108	0.00107	mg/L	1	0.00100	<0.0000329	108	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12352

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00104	0.00103	mg/L	1	0.00100	<0.0000329	104	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11627

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00110	110	80 - 120	2004-08-04

Standard (CCV-1) QC Batch: 11627

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00110	110	80 - 120	2004-08-04

Standard (ICV-1) QC Batch: 12352

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00106	106	80 - 120	2004-08-24

Standard (CCV-1) QC Batch: 12352

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00103	103	80 - 120	2004-08-24

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11621	Date Analyzed:	2004-07-23	Analyzed By:	JR
Prep Batch:	10263	Date Prepared:	2004-07-23	Prepared By:	JR
QC Batch:	11996	Date Analyzed:	2004-08-06	Analyzed By:	JR
Prep Batch:	10604	Date Prepared:	2004-08-06	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		4.23	mg/L	5	0.200
Chloride		6430	mg/L	1000	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		177	mg/L	50	0.100
Sulfate		12000	mg/L	1000	1.00

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11621	Date Analyzed:	2004-07-23	Analyzed By:	JR
Prep Batch:	10263	Date Prepared:	2004-07-23	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		3060	mg/L	500	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		96.3	mg/L	50	0.100
Sulfate		9380	mg/L	500	1.00

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11797	Date Analyzed:	2004-07-27	Analyzed By:	JR
Prep Batch:	10424	Date Prepared:	2004-07-27	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		2360	mg/L	100	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		82.2	mg/L	50	0.100
Sulfate		7230	mg/L	500	1.00

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11797	Date Analyzed:	2004-07-27	Analyzed By:	JR
Prep Batch:	10424	Date Prepared:	2004-07-27	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		462	mg/L	50	2.00
Fluoride		3.35	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		13.0	mg/L	5	0.100
Sulfate		4360	mg/L	500	1.00

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11796	Date Analyzed:	2004-07-30	Analyzed By:	JR
Prep Batch:	10423	Date Prepared:	2004-07-30	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		506	mg/L	50	2.00
Fluoride		3.68	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		26.0	mg/L	10	0.100
Sulfate		3830	mg/L	500	1.00

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11796	Date Analyzed:	2004-07-30	Analyzed By:	JR
Prep Batch:	10423	Date Prepared:	2004-07-30	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		952	mg/L	100	2.00
Fluoride		4.76	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		5.78	mg/L	5	0.100
Sulfate		4810	mg/L	500	1.00

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11795	Date Analyzed:	2004-07-29	Analyzed By:	JR
Prep Batch:	10421	Date Prepared:	2004-07-29	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		328	mg/L	50	2.00
Fluoride		3.74	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		12.2	mg/L	5	0.100
Sulfate		3160	mg/L	500	1.00

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11795	Date Analyzed:	2004-07-29	Analyzed By:	JR
Prep Batch:	10421	Date Prepared:	2004-07-29	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		1160	mg/L	100	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		42.3	mg/L	10	0.100
Sulfate		6240	mg/L	500	1.00

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11834	Date Analyzed:	2004-08-03	Analyzed By:	JR
Prep Batch:	10450	Date Prepared:	2004-08-03	Prepared By:	JR
QC Batch:	12331	Date Analyzed:	2004-08-11	Analyzed By:	JR
Prep Batch:	10897	Date Prepared:	2004-08-11	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		2160	mg/L	100	2.00
Fluoride		0.264	mg/L	1	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		71.6	mg/L	50	0.100
Sulfate		8740	mg/L	500	1.00

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11834	Date Analyzed:	2004-08-03	Analyzed By:	JR
Prep Batch:	10450	Date Prepared:	2004-08-03	Prepared By:	JR
QC Batch:	12331	Date Analyzed:	2004-08-11	Analyzed By:	JR
Prep Batch:	10897	Date Prepared:	2004-08-11	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		2160	mg/L	100	2.00
Fluoride		0.281	mg/L	1	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		71.6	mg/L	50	0.100
Sulfate		8900	mg/L	500	1.00

Method Blank (1) QC Batch: 11621

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 11795

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 11796

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 11797

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 11834

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 11996

Parameter	Flag	Result	Units	RL
Fluoride		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 12331

Parameter	Flag	Result	Units	RL
Fluoride		<0.200	mg/L	0.2

Laboratory Control Spike (LCS-1) QC Batch: 11621

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.45	2.43	mg/L	1	2.50	<0.0800	98	1	88.5 - 108	4
Chloride	11.3	11.4	mg/L	1	12.5	<0.310	90	1	87.3 - 101	3
Fluoride	2.33	2.32	mg/L	1	2.50	<0.0400	93	0	88.6 - 107	2
Nitrite-N	2.35	2.35	mg/L	1	2.50	<0.0100	94	0	90.5 - 103	2
Nitrate-N	2.40	2.41	mg/L	1	2.50	<0.0100	96	0	87.8 - 107	1.4
Sulfate	11.9	12.0	mg/L	1	12.5	<0.160	95	1	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11795

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.48	2.47	mg/L	1	2.50	<0.0800	99	0	88.5 - 108	4
Chloride	11.6	11.5	mg/L	1	12.5	<0.310	93	1	87.3 - 101	3
Fluoride	2.39	2.38	mg/L	1	2.50	<0.0400	96	0	88.6 - 107	2
Nitrite-N	2.40	2.39	mg/L	1	2.50	<0.0100	96	0	90.5 - 103	2
Nitrate-N	2.41	2.41	mg/L	1	2.50	<0.0100	96	0	87.8 - 107	1.4
Sulfate	12.1	12.1	mg/L	1	12.5	<0.160	97	0	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11796

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.40	2.39	mg/L	1	2.50	<0.0800	96	0	88.5 - 108	4
Chloride	11.6	11.5	mg/L	1	12.5	<0.310	93	1	87.3 - 101	3
Fluoride	2.37	2.36	mg/L	1	2.50	<0.0400	95	0	88.6 - 107	2
Nitrite-N	2.40	2.38	mg/L	1	2.50	<0.0100	96	1	90.5 - 103	2
Nitrate-N	2.40	2.41	mg/L	1	2.50	<0.0100	96	0	87.8 - 107	1.4
Sulfate	12.2	12.1	mg/L	1	12.5	<0.160	98	1	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11797

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.50	2.45	mg/L	1	2.50	<0.0800	100	2	88.5 - 108	4
Chloride	11.8	11.8	mg/L	1	12.5	<0.310	94	0	87.3 - 101	3
Fluoride	2.42	2.42	mg/L	1	2.50	<0.0400	97	0	88.6 - 107	2
Nitrite-N	2.44	2.43	mg/L	1	2.50	<0.0100	98	0	90.5 - 103	2
Nitrate-N	2.45	2.45	mg/L	1	2.50	<0.0100	98	0	87.8 - 107	1.4
Sulfate	12.2	12.2	mg/L	1	12.5	<0.160	98	0	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11834

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.40	2.44	mg/L	1	2.50	<0.0800	96	2	88.5 - 108	4
Chloride	11.4	11.6	mg/L	1	12.5	<0.310	91	2	87.3 - 101	3
Nitrite-N	2.37	2.39	mg/L	1	2.50	<0.0100	95	1	90.5 - 103	2
Nitrate-N	2.39	2.41	mg/L	1	2.50	<0.0100	96	1	87.8 - 107	1.4
Sulfate	12.0	12.1	mg/L	1	12.5	<0.160	96	1	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11996

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	2.32	2.37	mg/L	1	2.50	<0.0400	93	2	88.6 - 107	2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12331

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	2.42	2.45	mg/L	1	2.50	<0.0400	97	1	88.6 - 107	2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11621

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1210	1220	mg/L	500	2.50	<40.0	96	1	85.2 - 113	3
Chloride	12600	12600	mg/L	500	12.5	6430	99	0	78 - 107	3
Fluoride	1160	1160	mg/L	500	2.50	<20.0	93	0	88.3 - 108	2
Nitrite-N	1170	1170	mg/L	500	2.50	<5.00	94	0	89.4 - 105	2
Nitrate-N	1360	1370	mg/L	500	2.50	177	95	1	78.3 - 109	2
Sulfate	18500	18500	mg/L	500	12.5	12000	104	0	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11795

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1230	1230	mg/L	500	2.50	<40.0	98	0	85.2 - 113	3
Chloride	6950	6970	mg/L	500	12.5	1160	93	0	78 - 107	3
Fluoride	1190	1190	mg/L	500	2.50	<20.0	95	0	88.3 - 108	2
Nitrite-N	1210	1210	mg/L	500	2.50	<5.00	97	0	89.4 - 105	2
Nitrate-N	1240	1250	mg/L	500	2.50	42.3	96	1	78.3 - 109	2
Sulfate	12000	12000	mg/L	500	12.5	6240	92	0	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11796

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1230	1220	mg/L	500	2.50	<40.0	98	1	85.2 - 113	3
Chloride	6290	6280	mg/L	500	12.5	506	92	0	78 - 107	3
Fluoride	1190	1180	mg/L	500	2.50	<20.0	95	1	88.3 - 108	2
Nitrite-N	1200	1190	mg/L	500	2.50	<5.00	96	1	89.4 - 105	2
Nitrate-N	1220	1220	mg/L	500	2.50	26	96	0	78.3 - 109	2
Sulfate	9660	9570	mg/L	500	12.5	3830	93	1	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11797

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1220	1230	mg/L	500	2.50	<40.0	98	1	85.2 - 113	3
Chloride	6390	6380	mg/L	500	12.5	462	95	0	78 - 107	3
Fluoride	1210	1220	mg/L	500	2.50	<20.0	96	1	88.3 - 108	2
Nitrite-N	1220	1220	mg/L	500	2.50	<5.00	98	0	89.4 - 105	2
Nitrate-N	1240	1240	mg/L	500	2.50	13	98	0	78.3 - 109	2
Sulfate	10200	10200	mg/L	500	12.5	4360	93	0	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11834

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1220	1230	mg/L	500	2.50	<40.0	98	1	85.2 - 113	3
Chloride	7780	7760	mg/L	500	12.5	2160	90	0	78 - 107	3
Nitrite-N	1190	1180	mg/L	500	2.50	<5.00	95	1	89.4 - 105	2
Nitrate-N	1260	1260	mg/L	500	2.50	71.6	95	0	78.3 - 109	2
Sulfate	14400	14500	mg/L	500	12.5	8740	90	1	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11996

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	12.0	12.0	mg/L	5	2.50	<0.200	96	0	88.3 - 108	2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12331

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	12.2	12.2	mg/L	5	2.50	<0.200	98	0	88.3 - 108	2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11621

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.34	94	90 - 110	2004-07-23
Chloride		mg/L	12.5	11.3	90	90 - 110	2004-07-23
Fluoride		mg/L	2.50	2.32	93	90 - 110	2004-07-23
Nitrite-N		mg/L	2.50	2.30	92	90 - 110	2004-07-23
Nitrate-N		mg/L	2.50	2.24	90	90 - 110	2004-07-23
Sulfate		mg/L	12.5	11.3	90	90 - 110	2004-07-23

Standard (CCV-1) QC Batch: 11621

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	2004-07-23
Chloride		mg/L	12.5	11.6	93	85 - 115	2004-07-23
Fluoride		mg/L	2.50	2.37	95	85 - 115	2004-07-23
Nitrite-N		mg/L	2.50	2.35	94	85 - 115	2004-07-23
Nitrate-N		mg/L	2.50	2.31	92	85 - 115	2004-07-23
Sulfate		mg/L	12.5	11.5	92	85 - 115	2004-07-23

Standard (ICV-1) QC Batch: 11795

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.39	96	90 - 110	2004-07-29
Chloride		mg/L	12.5	11.5	92	90 - 110	2004-07-29
Fluoride		mg/L	2.50	2.39	96	90 - 110	2004-07-29
Nitrite-N		mg/L	2.50	2.39	96	90 - 110	2004-07-29
Nitrate-N		mg/L	2.50	2.29	92	90 - 110	2004-07-29
Sulfate		mg/L	12.5	11.5	92	90 - 110	2004-07-29

Standard (CCV-1) QC Batch: 11795

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.40	96	90 - 110	2004-07-29
Chloride		mg/L	12.5	11.6	93	85 - 115	2004-07-29
Fluoride		mg/L	2.50	2.38	95	85 - 115	2004-07-29
Nitrite-N		mg/L	2.50	2.39	96	85 - 115	2004-07-29
Nitrate-N		mg/L	2.50	2.30	92	85 - 115	2004-07-29
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-07-29

Standard (ICV-1) QC Batch: 11796

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.40	96	90 - 110	2004-07-30
Chloride		mg/L	12.5	11.6	93	90 - 110	2004-07-30
Fluoride		mg/L	2.50	2.39	96	90 - 110	2004-07-30
Nitrite-N		mg/L	2.50	2.40	96	90 - 110	2004-07-30
Nitrate-N		mg/L	2.50	2.29	92	90 - 110	2004-07-30
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-07-30

Standard (CCV-1) QC Batch: 11796

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	2004-07-30
Chloride		mg/L	12.5	11.6	93	85 - 115	2004-07-30
Fluoride		mg/L	2.50	2.38	95	85 - 115	2004-07-30
Nitrite-N		mg/L	2.50	2.39	96	85 - 115	2004-07-30
Nitrate-N		mg/L	2.50	2.29	92	85 - 115	2004-07-30
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-07-30

Standard (ICV-1) QC Batch: 11797

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.43	97	90 - 110	2004-07-27
Chloride		mg/L	12.5	11.8	94	90 - 110	2004-07-27
Fluoride		mg/L	2.50	2.42	97	90 - 110	2004-07-27
Nitrite-N		mg/L	2.50	2.43	97	90 - 110	2004-07-27
Nitrate-N		mg/L	2.50	2.33	93	90 - 110	2004-07-27
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-07-27

Standard (CCV-1) QC Batch: 11797

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.43	97	90 - 110	2004-07-27
Chloride		mg/L	12.5	11.8	94	85 - 115	2004-07-27
Fluoride		mg/L	2.50	2.42	97	85 - 115	2004-07-27
Nitrite-N		mg/L	2.50	2.43	97	85 - 115	2004-07-27
Nitrate-N		mg/L	2.50	2.33	93	85 - 115	2004-07-27
Sulfate		mg/L	12.5	11.7	94	85 - 115	2004-07-27

Standard (ICV-1) QC Batch: 11834

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.39	96	90 - 110	2004-08-03
Chloride		mg/L	12.5	11.4	91	90 - 110	2004-08-03
Nitrite-N		mg/L	2.50	2.38	95	90 - 110	2004-08-03
Nitrate-N		mg/L	2.50	2.28	91	90 - 110	2004-08-03
Sulfate		mg/L	12.5	11.5	92	90 - 110	2004-08-03

Standard (CCV-1) QC Batch: 11834

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	2004-08-03
Chloride		mg/L	12.5	11.4	91	85 - 115	2004-08-03

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrite-N		mg/L	2.50	2.39	96	85 - 115	2004-08-03
Nitrate-N		mg/L	2.50	2.28	91	85 - 115	2004-08-03
Sulfate		mg/L	12.5	11.5	92	85 - 115	2004-08-03

Standard (ICV-1) QC Batch: 11996

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.38	95	90 - 110	2004-08-06

Standard (CCV-1) QC Batch: 11996

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.37	95	85 - 115	2004-08-06

Standard (ICV-1) QC Batch: 12331

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.43	97	90 - 110	2004-08-11

Standard (CCV-1) QC Batch: 12331

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.43	97	85 - 115	2004-08-11

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11339	Date Analyzed:	2004-07-26	Analyzed By:	MK
Prep Batch:	10025	Date Prepared:	2004-07-23	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.60	s.u.	1	0.00

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11339	Date Analyzed:	2004-07-26	Analyzed By:	MK
Prep Batch:	10025	Date Prepared:	2004-07-23	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.35	s.u.	1	0.00

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11429	Date Analyzed:	2004-07-27	Analyzed By:	MK
Prep Batch:	10101	Date Prepared:	2004-07-27	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.54	s.u.	1	0.00

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11499	Date Analyzed:	2004-07-28	Analyzed By:	MK
Prep Batch:	10159	Date Prepared:	2004-07-28	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.66	s.u.	1	0.00

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11503	Date Analyzed:	2004-07-30	Analyzed By:	MK
Prep Batch:	10162	Date Prepared:	2004-07-30	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.64	s.u.	1	0.00

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11503	Date Analyzed:	2004-07-30	Analyzed By:	MK
Prep Batch:	10162	Date Prepared:	2004-07-30	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.20	s.u.	1	0.00

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11501	Date Analyzed:	2004-07-29	Analyzed By:	MK
Prep Batch:	10160	Date Prepared:	2004-07-29	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.83	s.u.	1	0.00

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11501	Date Analyzed:	2004-07-29	Analyzed By:	MK
Prep Batch:	10160	Date Prepared:	2004-07-29	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.64	s.u.	1	0.00

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12021	Date Analyzed:	2004-08-03	Analyzed By:	MK
Prep Batch:	10624	Date Prepared:	2004-08-03	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.56	s.u.	1	0.00

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12021	Date Analyzed:	2004-08-03	Analyzed By:	MK

Prep Batch: 10624 Date Prepared: 2004-08-03 Prepared By: MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.55	s.u.	1	0.00

Duplicate (1) QC Batch: 11339

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.61	7.60	s.u.	1	0	

Duplicate (1) QC Batch: 11429

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.53	7.54	s.u.	1	0	

Duplicate (1) QC Batch: 11499

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.65	7.66	s.u.	1	0	

Duplicate (1) QC Batch: 11501

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.63	7.64	s.u.	1	0	

Duplicate (1) QC Batch: 11503

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.21	7.20	s.u.	1	0	

Duplicate (1) QC Batch: 12021

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	8.34	8.34	s.u.	1	0	

Standard (ICV-1) QC Batch: 11339

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.97	100	98 - 102	2004-07-26

Standard (CCV-1) QC Batch: 11339

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.95	99	98 - 102	2004-07-26

Standard (ICV-1) QC Batch: 11429

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.97	100	98 - 102	2004-07-27

Standard (CCV-1) QC Batch: 11429

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.94	99	98 - 102	2004-07-27

Standard (ICV-1) QC Batch: 11499

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.97	100	98 - 102	2004-07-28

Standard (CCV-1) QC Batch: 11499

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.94	99	98 - 102	2004-07-28

Standard (ICV-1) QC Batch: 11501

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.97	100	98 - 102	2004-07-29

Standard (CCV-1) QC Batch: 11501

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.94	99	98 - 102	2004-07-29

Standard (ICV-1) QC Batch: 11503

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.93	99	98 - 102	2004-07-30

Standard (CCV-1) QC Batch: 11503

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.98	100	98 - 102	2004-07-30

Standard (ICV-1) QC Batch: 12021

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.01	100	98 - 102	2004-08-03

Standard (CCV-1) QC Batch: 12021

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.99	100	98 - 102	2004-08-03

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11826	Date Analyzed:	2004-08-11	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		476	mg/L	1	0.500
Dissolved Magnesium		1570	mg/L	1	0.500

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11826	Date Analyzed:	2004-08-11	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		415	mg/L	1	0.500
Dissolved Magnesium		986	mg/L	1	0.500

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11826	Date Analyzed:	2004-08-11	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		352	mg/L	1	0.500
Dissolved Magnesium		791	mg/L	1	0.500

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11826	Date Analyzed:	2004-08-11	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		467	mg/L	1	0.500
Dissolved Magnesium		401	mg/L	1	0.500

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11710	Date Analyzed:	2004-08-06	Analyzed By:	RR

Prep Batch: 10292 Date Prepared: 2004-08-04 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		514	mg/L	1	0.500
Dissolved Magnesium		453	mg/L	1	0.500

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis: Salts, Dissolved Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 11710 Date Analyzed: 2004-08-06 Analyzed By: RR
Prep Batch: 10292 Date Prepared: 2004-08-04 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		484	mg/L	1	0.500
Dissolved Magnesium		626	mg/L	1	0.500

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis: Salts, Dissolved Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 11710 Date Analyzed: 2004-08-06 Analyzed By: RR
Prep Batch: 10292 Date Prepared: 2004-08-04 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		462	mg/L	1	0.500
Dissolved Magnesium		379	mg/L	1	0.500

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis: Salts, Dissolved Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 11712 Date Analyzed: 2004-08-06 Analyzed By: RR
Prep Batch: 10292 Date Prepared: 2004-08-04 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		306	mg/L	1	0.500
Dissolved Magnesium		538	mg/L	1	0.500

Method Blank (1) QC Batch: 11710

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 11712

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 11826

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5

Laboratory Control Spike (LCS-1) QC Batch: 11710

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	100	107	mg/L	1	100	<0.00971	100	7	85 - 115	20
Dissolved Magnesium	102	112	mg/L	1	100	<0.0138	102	9	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11712

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	100	107	mg/L	1	100	<0.00971	100	7	85 - 115	20
Dissolved Magnesium	102	112	mg/L	1	100	<0.0138	102	9	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11826

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	101	100	mg/L	1	100	<0.00971	101	1	85 - 115	20
Dissolved Magnesium	99.9	102	mg/L	1	100	<0.0138	100	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11710

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	595	608	mg/L	1	100	514	81	2	75 - 125	20
Dissolved Magnesium	543	550	mg/L	1	100	453	90	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11712

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	595	608	mg/L	1	100	514	81	2	75 - 125	20
Dissolved Magnesium	543	550	mg/L	1	100	453	90	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11826

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	109	110	mg/L	1	100	<0.00971	109	1	75 - 125	20
Dissolved Magnesium	103	103	mg/L	1	100	<0.0138	103	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11710

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.9	100	90 - 110	2004-08-06
Dissolved Magnesium		mg/L	25.0	25.0	100	90 - 110	2004-08-06

Standard (CCV-1) QC Batch: 11710

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.7	99	90 - 110	2004-08-06
Dissolved Magnesium		mg/L	25.0	24.8	99	90 - 110	2004-08-06

Standard (ICV-1) QC Batch: 11712

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.9	100	90 - 110	2004-08-06
Dissolved Magnesium		mg/L	25.0	25.0	100	90 - 110	2004-08-06

Standard (CCV-1) QC Batch: 11712

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.4	98	90 - 110	2004-08-06
Dissolved Magnesium		mg/L	25.0	23.8	95	90 - 110	2004-08-06

Standard (ICV-1) QC Batch: 11826

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.9	100	90 - 110	2004-08-11
Dissolved Magnesium		mg/L	25.0	25.0	100	90 - 110	2004-08-11

Standard (CCV-1) QC Batch: 11826

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.3	97	90 - 110	2004-08-11
Dissolved Magnesium		mg/L	25.0	24.4	98	90 - 110	2004-08-11

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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 31 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11633	Date Analyzed:	2004-08-03	Analyzed By:	RC
Prep Batch:	10225	Date Prepared:	2004-08-02	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00

continued . . .

sample 39702 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0364	mg/L	0.001	80.0	46	0 - 69.3
Phenol-d5		0.0271	mg/L	0.001	80.0	34	0 - 52.5
Nitrobenzene-d5		0.0571	mg/L	0.001	80.0	71	21.1 - 93.6
2-Fluorobiphenyl		0.0422	mg/L	0.001	80.0	53	25.4 - 87
2,4,6-Tribromophenol		0.0459	mg/L	0.001	80.0	57	14.9 - 110
Terphenyl-d14		0.0415	mg/L	0.001	80.0	52	28.9 - 124

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11633	Date Analyzed:	2004-08-03	Analyzed By:	RC
Prep Batch:	10225	Date Prepared:	2004-08-02	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 39704 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 39704 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0248	mg/L	0.001	80.0	31	0 - 69.3
Phenol-d5		0.0193	mg/L	0.001	80.0	24	0 - 52.5
Nitrobenzene-d5		0.0536	mg/L	0.001	80.0	67	21.1 - 93.6
2-Fluorobiphenyl		0.0395	mg/L	0.001	80.0	49	25.4 - 87
2,4,6-Tribromophenol		0.0435	mg/L	0.001	80.0	54	14.9 - 110
Terphenyl-d14		0.0413	mg/L	0.001	80.0	52	28.9 - 124

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11633	Date Analyzed:	2004-08-03	Analyzed By:	RC
Prep Batch:	10225	Date Prepared:	2004-08-02	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00

continued . . .

sample 39870 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0

continued . . .

sample 39870 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0237	mg/L	0.001	80.0	30	0 - 69.3
Phenol-d5		0.0140	mg/L	0.001	80.0	18	0 - 52.5
Nitrobenzene-d5		0.0473	mg/L	0.001	80.0	59	21.1 - 93.6
2-Fluorobiphenyl		0.0342	mg/L	0.001	80.0	43	25.4 - 87
2,4,6-Tribromophenol		0.0354	mg/L	0.001	80.0	44	14.9 - 110
Terphenyl-d14		0.0359	mg/L	0.001	80.0	45	28.9 - 124

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11633	Date Analyzed:	2004-08-03	Analyzed By:	RC
Prep Batch:	10225	Date Prepared:	2004-08-02	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00

continued . . .

sample 39918 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00

continued . . .

sample 39918 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0274	mg/L	0.001	80.0	34	0 - 69.3
Phenol-d5		0.0185	mg/L	0.001	80.0	23	0 - 52.5
Nitrobenzene-d5		0.0480	mg/L	0.001	80.0	60	21.1 - 93.6
2-Fluorobiphenyl		0.0332	mg/L	0.001	80.0	42	25.4 - 87
2,4,6-Tribromophenol		0.0380	mg/L	0.001	80.0	48	14.9 - 110
Terphenyl-d14		0.0331	mg/L	0.001	80.0	41	28.9 - 124

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11681	Date Analyzed:	2004-08-04	Analyzed By:	RC
Prep Batch:	10313	Date Prepared:	2004-08-04	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00

continued . . .

sample 40248 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 40248 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0327	mg/L	0.001	80.0	41	0 - 69.3
Phenol-d5		0.0179	mg/L	0.001	80.0	22	0 - 52.5
Nitrobenzene-d5		0.0674	mg/L	0.001	80.0	84	21.1 - 93.6
2-Fluorobiphenyl		0.0580	mg/L	0.001	80.0	72	25.4 - 87
2,4,6-Tribromophenol		0.0517	mg/L	0.001	80.0	65	14.9 - 110
Terphenyl-d14		0.0511	mg/L	0.001	80.0	64	28.9 - 124

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11681	Date Analyzed:	2004-08-04	Analyzed By:	RC
Prep Batch:	10313	Date Prepared:	2004-08-04	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 40250 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0321	mg/L	0.001	80.0	40	0 - 69.3
Phenol-d5		0.0192	mg/L	0.001	80.0	24	0 - 52.5
Nitrobenzene-d5		0.0642	mg/L	0.001	80.0	80	21.1 - 93.6
2-Fluorobiphenyl		0.0541	mg/L	0.001	80.0	68	25.4 - 87

continued . . .

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,6-Tribromophenol		0.0507	mg/L	0.001	80.0	63	14.9 - 110
Terphenyl-d14		0.0404	mg/L	0.001	80.0	50	28.9 - 124

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11681	Date Analyzed:	2004-08-04	Analyzed By:	RC
Prep Batch:	10313	Date Prepared:	2004-08-04	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 40252 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00

continued . . .

sample 40252 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0389	mg/L	0.001	80.0	49	0 - 69.3
Phenol-d5		0.0211	mg/L	0.001	80.0	26	0 - 52.5
Nitrobenzene-d5		0.0672	mg/L	0.001	80.0	84	21.1 - 93.6
2-Fluorobiphenyl		0.0548	mg/L	0.001	80.0	68	25.4 - 87
2,4,6-Tribromophenol		0.0515	mg/L	0.001	80.0	64	14.9 - 110
Terphenyl-d14		0.0519	mg/L	0.001	80.0	65	28.9 - 124

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11681	Date Analyzed:	2004-08-04	Analyzed By:	RC
Prep Batch:	10313	Date Prepared:	2004-08-04	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0

continued . . .

sample 40254 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00

continued . . .

sample 40254 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0396	mg/L	0.001	80.0	50	0 - 69.3
Phenol-d5		0.0217	mg/L	0.001	80.0	27	0 - 52.5
Nitrobenzene-d5		0.0648	mg/L	0.001	80.0	81	21.1 - 93.6
2-Fluorobiphenyl		0.0539	mg/L	0.001	80.0	67	25.4 - 87
2,4,6-Tribromophenol		0.0492	mg/L	0.001	80.0	62	14.9 - 110
Terphenyl-d14		0.0515	mg/L	0.001	80.0	64	28.9 - 124

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11681	Date Analyzed:	2004-08-04	Analyzed By:	RC
Prep Batch:	10313	Date Prepared:	2004-08-04	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00

continued . . .

sample 40388 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00

continued . . .

sample 40388 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0300	mg/L	0.001	80.0	38	0 - 69.3
Phenol-d5		0.0165	mg/L	0.001	80.0	21	0 - 52.5
Nitrobenzene-d5		0.0683	mg/L	0.001	80.0	85	21.1 - 93.6
2-Fluorobiphenyl	[1]	0.0800	mg/L	0.001	80.0	100	25.4 - 87
2,4,6-Tribromophenol		0.0713	mg/L	0.001	80.0	89	14.9 - 110
Terphenyl-d14		0.0723	mg/L	0.001	80.0	90	28.9 - 124

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11681	Date Analyzed:	2004-08-04	Analyzed By:	RC
Prep Batch:	10313	Date Prepared:	2004-08-04	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00

continued . . .

[1]Sample surrogate recovery out of limits due to sample matrix.

sample 40390 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00

continued . . .

sample 40390 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0330	mg/L	0.001	80.0	41	0 - 69.3
Phenol-d5		0.0183	mg/L	0.001	80.0	23	0 - 52.5
Nitrobenzene-d5		0.0633	mg/L	0.001	80.0	79	21.1 - 93.6
2-Fluorobiphenyl	[2]	0.0739	mg/L	0.001	80.0	92	25.4 - 87
2,4,6-Tribromophenol		0.0648	mg/L	0.001	80.0	81	14.9 - 110
Terphenyl-d14		0.0741	mg/L	0.001	80.0	93	28.9 - 124

Method Blank (1) QC Batch: 11633

[2]Sample surrogate recovery out of limits due to sample matrix.

Parameter	Flag	Result	Units	RL
Pyridine	[3]	<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5

continued . . .

[3]alpha-Terpineol <0.005 mg/L

method blank continued . . .

Parameter	Flag	Result	Units	RL
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0318	mg/L	0.001	80.0	40	0 - 69.3
Phenol-d5		0.0334	mg/L	0.001	80.0	42	0 - 52.5
Nitrobenzene-d5		0.0318	mg/L	0.001	80.0	40	21.1 - 93.6
2-Fluorobiphenyl		0.0326	mg/L	0.001	80.0	41	25.4 - 87
2,4,6-Tribromophenol		0.0323	mg/L	0.001	80.0	40	14.9 - 110
Terphenyl-d14		0.0359	mg/L	0.001	80.0	45	28.9 - 124

Method Blank (1) QC Batch: 11681

Parameter	Flag	Result	Units	RL
Pyridine	[4]	<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20

continued . . .

[4] alpha-Terpineol <0.005 mg/L

method blank continued . . .

Parameter	Flag	Result	Units	RL
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0309	mg/L	0.001	80.0	39	0 - 69.3
Phenol-d5		0.0325	mg/L	0.001	80.0	41	0 - 52.5
Nitrobenzene-d5		0.0315	mg/L	0.001	80.0	39	21.1 - 93.6
2-Fluorobiphenyl		0.0325	mg/L	0.001	80.0	41	25.4 - 87
2,4,6-Tribromophenol		0.0337	mg/L	0.001	80.0	42	14.9 - 110
Terphenyl-d14		0.0364	mg/L	0.001	80.0	46	28.9 - 124

Laboratory Control Spike (LCS-1) QC Batch: 11633

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	[5][6]	13.8	13.6	mg/L	1	80.0	<0.490	17	1	0 - 52.1	20
2-Chlorophenol		42.3	41.9	mg/L	1	80.0	<1.63	53	1	9.7 - 98.2	20
1,4-Dichlorobenzene (para)		23.2	22.9	mg/L	1	80.0	<1.93	29	1	18.1 - 111	20
n-Nitrosodi-n-propylamine		54.2	53.9	mg/L	1	80.0	<2.26	68	0	36.6 - 121	20
1,2,4-Trichlorobenzene		21.5	21.6	mg/L	1	80.0	<1.52	27	0	20.8 - 112	20
4-Chloro-3-methylphenol		37.3	37.7	mg/L	1	80.0	<1.60	47	1	14.3 - 102	20
Acenaphthene		31.6	31.8	mg/L	1	80.0	<1.58	40	1	32.6 - 123	20
4-Nitrophenol		<3.83	<3.83	mg/L	1	80.0	<3.83	0	0	0 - 51.9	20
2,4-Dinitrotoluene		40.4	40.2	mg/L	1	80.0	<2.09	50	0	32.6 - 138	20
Pentachlorophenol		31.0	30.8	mg/L	1	80.0	<3.04	39	1	0 - 121	20
Pyrene	[7][8]	29.5	29.6	mg/L	1	80.0	<1.81	37	0	38.4 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	27.9	27.8	mg/L	1	80.0	35	35	0 - 69.3
Phenol-d5	16.7	16.6	mg/L	1	80.0	21	21	0 - 52.5
Nitrobenzene-d5	46.1	45.9	mg/L	1	80.0	58	57	21.1 - 93.6
2-Fluorobiphenyl	39.1	39.0	mg/L	1	80.0	49	49	25.4 - 87
2,4,6-Tribromophenol	41.5	40.5	mg/L	1	80.0	52	51	14.9 - 110
Terphenyl-d14	38.9	39.2	mg/L	1	80.0	49	49	28.9 - 124

Laboratory Control Spike (LCS-1) QC Batch: 11681

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	[9][10]	13.5	14.0	mg/L	1	80.0	<0.490	17	4	0 - 52.1	20
2-Chlorophenol		42.2	42.7	mg/L	1	80.0	<1.63	53	1	9.7 - 98.2	20
1,4-Dichlorobenzene (para)		22.6	22.7	mg/L	1	80.0	<1.93	28	0	18.1 - 111	20
n-Nitrosodi-n-propylamine		53.8	52.3	mg/L	1	80.0	<2.26	67	3	36.6 - 121	20
1,2,4-Trichlorobenzene		21.7	21.8	mg/L	1	80.0	<1.52	27	0	20.8 - 112	20
4-Chloro-3-methylphenol		36.6	37.1	mg/L	1	80.0	<1.60	46	1	14.3 - 102	20
Acenaphthene		32.4	32.3	mg/L	1	80.0	<1.58	40	0	32.6 - 123	20
4-Nitrophenol		<3.83	<3.83	mg/L	1	80.0	<3.83	0	0	0 - 51.9	20
2,4-Dinitrotoluene		40.3	41.3	mg/L	1	80.0	<2.09	50	2	32.6 - 138	20
Pentachlorophenol		30.9	32.9	mg/L	1	80.0	<3.04	39	6	0 - 121	20
Pyrene	[11][12]	29.7	27.1	mg/L	1	80.0	<1.81	37	9	38.4 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued . . .

[5]alpha-Terpineol 44.93 mg/L
[6]alpha-Terpineol 44.75 mg/L
[7]The average of the spike compounds shows that the process is in control.
[8]The average of the spike compounds shows that the process is in control.
[9]alpha-Terpineol 44.93 mg/L
[10]alpha-Terpineol 44.43 mg/L
[11]The average of the spike compounds shows that the process is in control.
[12]The average of the spike compounds shows that the process is in control.

control spikes continued . . .

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	27.6	29.9	mg/L	1	80.0	34	37	0 - 69.3
Phenol-d5	16.6	17.1	mg/L	1	80.0	21	21	0 - 52.5
Nitrobenzene-d5	45.7	47.8	mg/L	1	80.0	57	60	21.1 - 93.6
2-Fluorobiphenyl	39.6	40.5	mg/L	1	80.0	50	51	25.4 - 87
2,4,6-Tribromophenol	42.6	41.2	mg/L	1	80.0	53	52	14.9 - 110
Terphenyl-d14	39.9	37.0	mg/L	1	80.0	50	46	28.9 - 124

Matrix Spike (MS-1) QC Batch: 11633

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol		7.47	7.54	mg/L	1	80.0	<0.490	9	1	0 - 59.4	
2-Chlorophenol	[13][14]	25.8	26.6	mg/L	1	80.0	<1.63	32	3	33.87 - 76.65	
1,4-Dichlorobenzene (para)		12.3	12.4	mg/L	1	80.0	<1.93	15	1	5.66 - 106.63	
n-Nitrosodi-n-propylamine		36.2	36.4	mg/L	1	80.0	<2.26	45	0	2.12 - 116.53	
1,2,4-Trichlorobenzene		12.0	12.1	mg/L	1	80.0	<1.52	15	1	8.26 - 101.73	
4-Chloro-3-methylphenol	[15][16]	26.8	26.7	mg/L	1	80.0	<1.60	34	0	49.08 - 66.06	
Acenaphthene		25.5	25.6	mg/L	1	80.0	<1.58	32	0	10.76 - 107.89	
4-Nitrophenol		<3.83	<3.83	mg/L	1	80.0	<3.83	0	0	0 - 70.4	
2,4-Dinitrotoluene		38.8	39.3	mg/L	1	80.0	<2.09	48	1	0 - 140	
Pentachlorophenol		28.0	28.6	mg/L	1	80.0	<3.04	35	2	0 - 121	
Pyrene		31.7	31.8	mg/L	1	80.0	<1.81	40	0	13.81 - 106.27	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol		16.0	16.1	mg/L	1	80	20	20	7.07 - 72.13
Phenol-d5		9.25	9.52	mg/L	1	80	12	12	0 - 67.01
Nitrobenzene-d5		31.7	31.9	mg/L	1	80	40	40	32.4 - 110.8
2-Fluorobiphenyl	[17][18]	27.1	27.2	mg/L	1	80	34	34	46.84 - 91.48
2,4,6-Tribromophenol		39.1	39.6	mg/L	1	80	49	50	29.39 - 110.7
Terphenyl-d14		37.8	37.6	mg/L	1	80	47	47	34.1 - 95.34

Matrix Spike (MS-1) QC Batch: 11681

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	8.07	7.63	mg/L	1	80.0	<0.490	10	6	0 - 59.4	

continued . . .

[13]The average of the matrix spike compounds shows that the process is in control.
[14]The average of the matrix spike compounds shows that the process is in control.
[15]The average of the matrix spike compounds shows that the process is in control.
[16]The average of the matrix spike compounds shows that the process is in control.
[17]The average of the matrix spike compoounds shows that the process is in control.
[18]The average of the matrix spike compounds shows that the process is in control.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
2-Chlorophenol	[19][20]	23.6	22.7	mg/L	1	80.0	<1.63	30	4	33.87 - 76.65	
1,4-Dichlorobenzene (para)		29.4	28.3	mg/L	1	80.0	<1.93	37	4	5.66 - 106.63	
n-Nitrosodi-n-propylamine		32.9	31.7	mg/L	1	80.0	<2.26	41	4	2.12 - 116.53	
1,2,4-Trichlorobenzene		30.5	30.8	mg/L	1	80.0	<1.52	38	1	8.26 - 101.73	
4-Chloro-3-methylphenol	[21][22]	24.6	24.8	mg/L	1	80.0	<1.60	31	1	49.08 - 66.06	
Acenaphthene		20.5	20.4	mg/L	1	80.0	<1.58	26	0	10.76 - 107.89	
4-Nitrophenol		<3.83	<3.83	mg/L	1	80.0	<3.83	0	0	0 - 70.4	
2,4-Dinitrotoluene		36.6	37.2	mg/L	1	80.0	<2.09	46	2	0 - 140	
Pentachlorophenol		30.1	29.8	mg/L	1	80.0	<3.04	38	1	0 - 121	
Pyrene		33.6	33.6	mg/L	1	80.0	<1.81	42	0	13.81 - 106.27	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol		14.5	13.2	mg/L	1	80	18	16	7.07 - 72.13
Phenol-d5		9.53	9.46	mg/L	1	80	12	12	0 - 67.01
Nitrobenzene-d5		27.7	28.2	mg/L	1	80	35	35	32.4 - 110.8
2-Fluorobiphenyl	[23][24]	21.1	21.3	mg/L	1	80	26	27	46.84 - 91.48
2,4,6-Tribromophenol		34.2	34.8	mg/L	1	80	43	44	29.39 - 110.7
Terphenyl-d14		34.7	34.8	mg/L	1	80	43	44	34.1 - 95.34

Standard (CCV-1) QC Batch: 11633

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	60.2	100	80 - 120	2004-08-03
1,4-Dichlorobenzene (para)		mg/L	60.0	60.4	101	80 - 120	2004-08-03
2-Nitrophenol		mg/L	60.0	64.0	106	80 - 120	2004-08-03
2,4-Dichlorophenol		mg/L	60.0	64.0	107	80 - 120	2004-08-03
Hexachlorobutadiene		mg/L	60.0	61.8	103	80 - 120	2004-08-03
4-Chloro-3-methylphenol		mg/L	60.0	62.0	103	80 - 120	2004-08-03
2,4,6-Trichlorophenol		mg/L	60.0	60.5	101	80 - 120	2004-08-03
Acenaphthene		mg/L	60.0	60.7	101	80 - 120	2004-08-03
Diphenylamine		mg/L	60.0	60.3	100	80 - 120	2004-08-03
Pentachlorophenol		mg/L	60.0	65.5	109	80 - 120	2004-08-03
Fluoranthene		mg/L	60.0	60.1	100	80 - 120	2004-08-03
Di-n-octylphthalate		mg/L	60.0	61.6	103	80 - 120	2004-08-03
Benzo(a)pyrene		mg/L	60.0	61.7	103	80 - 120	2004-08-03

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		60.6	mg/L	1	60.0	101	80 - 120
Phenol-d5		60.1	mg/L	1	60.0	100	80 - 120
Nitrobenzene-d5		62.0	mg/L	1	60.0	103	80 - 120

continued . . .

[19]The average of the spike compounds shows that the process is in control.
[20]The average of the matrix spike compounds shows that the process is in control.
[21]The average of the spike compounds shows that the process is in control.
[22]The average of the matrix spike compounds shows that the process is in control.
[23]The average of the spike compounds shows that the process is in control.
[24]The average of the matrix spike compounds shows that the process is in control.

standard continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorobiphenyl		60.7	mg/L	1	60.0	101	80 - 120
2,4,6-Tribromophenol		62.7	mg/L	1	60.0	104	80 - 120
Terphenyl-d14		61.5	mg/L	1	60.0	102	80 - 120

Standard (CCV-1) QC Batch: 11681

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	59.0	98	80 - 120	2004-08-04
1,4-Dichlorobenzene (para)		mg/L	60.0	59.9	100	80 - 120	2004-08-04
2-Nitrophenol		mg/L	60.0	63.9	106	80 - 120	2004-08-04
2,4-Dichlorophenol		mg/L	60.0	60.4	101	80 - 120	2004-08-04
Hexachlorobutadiene		mg/L	60.0	61.0	102	80 - 120	2004-08-04
4-Chloro-3-methylphenol		mg/L	60.0	59.4	99	80 - 120	2004-08-04
2,4,6-Trichlorophenol		mg/L	60.0	59.2	99	80 - 120	2004-08-04
Acenaphthene		mg/L	60.0	60.8	101	80 - 120	2004-08-04
Diphenylamine		mg/L	60.0	60.4	101	80 - 120	2004-08-04
Pentachlorophenol		mg/L	60.0	62.1	104	80 - 120	2004-08-04
Fluoranthene		mg/L	60.0	61.0	102	80 - 120	2004-08-04
Di-n-octylphthalate		mg/L	60.0	62.2	104	80 - 120	2004-08-04
Benzo(a)pyrene		mg/L	60.0	61.7	103	80 - 120	2004-08-04

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		59.9	mg/L	1	60.0	100	80 - 120
Phenol-d5		59.4	mg/L	1	60.0	99	80 - 120
Nitrobenzene-d5		60.9	mg/L	1	60.0	102	80 - 120
2-Fluorobiphenyl		61.3	mg/L	1	60.0	102	80 - 120
2,4,6-Tribromophenol		59.8	mg/L	1	60.0	100	80 - 120
Terphenyl-d14		62.9	mg/L	1	60.0	105	80 - 120

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11497	Date Analyzed:	2004-07-28	Analyzed By:	JG
Prep Batch:	10157	Date Prepared:	2004-07-28	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		34700	mg/L	1	5.00

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11497	Date Analyzed:	2004-07-28	Analyzed By:	JG
Prep Batch:	10157	Date Prepared:	2004-07-28	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		21000	mg/L	1	5.00

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11497	Date Analyzed:	2004-07-28	Analyzed By:	JG
Prep Batch:	10157	Date Prepared:	2004-07-28	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		16200	mg/L	1	5.00

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11497	Date Analyzed:	2004-07-28	Analyzed By:	JG
Prep Batch:	10157	Date Prepared:	2004-07-28	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		7630	mg/L	1	5.00

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11919	Date Analyzed:	2004-08-02	Analyzed By:	JG
Prep Batch:	10536	Date Prepared:	2004-08-02	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		7350	mg/L	1	5.00

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11919	Date Analyzed:	2004-08-02	Analyzed By:	JG
Prep Batch:	10536	Date Prepared:	2004-08-02	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		9640	mg/L	1	5.00

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11919	Date Analyzed:	2004-08-02	Analyzed By:	JG
Prep Batch:	10536	Date Prepared:	2004-08-02	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		5780	mg/L	1	5.00

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11919	Date Analyzed:	2004-08-02	Analyzed By:	JG
Prep Batch:	10536	Date Prepared:	2004-08-02	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		11900	mg/L	1	5.00

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12080	Date Analyzed:	2004-08-06	Analyzed By:	JG
Prep Batch:	10676	Date Prepared:	2004-08-06	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		17500	mg/L	1	5.00

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12080	Date Analyzed:	2004-08-06	Analyzed By:	JG

Prep Batch: 10676 Date Prepared: 2004-08-06 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		17000	mg/L	1	5.00

Method Blank (1) QC Batch: 11497

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Method Blank (1) QC Batch: 11919

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Method Blank (1) QC Batch: 12080

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Duplicate (1) QC Batch: 11497

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	7580	7630	mg/L	1	1	8.4

Duplicate (1) QC Batch: 11919

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	9730	9640	mg/L	1	1	8.4

Duplicate (1) QC Batch: 12080

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	17100	17500	mg/L	1	2	8.4

Standard (ICV-1) QC Batch: 11497

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	936	94	92 - 107	2004-07-28

Standard (CCV-1) QC Batch: 11497

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	978	98	92 - 107	2004-07-28

Standard (ICV-1) QC Batch: 11919

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1010	101	92 - 107	2004-08-02

Standard (CCV-1) QC Batch: 11919

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1010	101	92 - 107	2004-08-02

Standard (ICV-1) QC Batch: 12080

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1000	100	92 - 107	2004-08-06

Standard (CCV-1) QC Batch: 12080

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	999	100	92 - 107	2004-08-06

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11543	Date Analyzed:	2004-07-29	Analyzed By:	WB
Prep Batch:	10204	Date Prepared:	2004-07-29	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11543	Date Analyzed:	2004-07-29	Analyzed By:	WB
Prep Batch:	10204	Date Prepared:	2004-07-29	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11559	Date Analyzed:	2004-07-30	Analyzed By:	WB
Prep Batch:	10211	Date Prepared:	2004-07-30	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11559	Date Analyzed:	2004-07-30	Analyzed By:	WB
Prep Batch:	10211	Date Prepared:	2004-07-30	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11652	Date Analyzed:	2004-08-03	Analyzed By:	WB
Prep Batch:	10288	Date Prepared:	2004-08-03	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11652	Date Analyzed:	2004-08-03	Analyzed By:	WB
Prep Batch:	10288	Date Prepared:	2004-08-03	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11652	Date Analyzed:	2004-08-03	Analyzed By:	WB
Prep Batch:	10288	Date Prepared:	2004-08-03	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11652	Date Analyzed:	2004-08-03	Analyzed By:	WB
Prep Batch:	10288	Date Prepared:	2004-08-03	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11792	Date Analyzed:	2004-08-09	Analyzed By:	WB
Prep Batch:	10417	Date Prepared:	2004-08-09	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.0	mg/L	1	4.00

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11792	Date Analyzed:	2004-08-09	Analyzed By:	WB

Prep Batch: 10417 Date Prepared: 2004-08-09 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.0	mg/L	1	4.00

Method Blank (1) QC Batch: 11543

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	4

Method Blank (1) QC Batch: 11559

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	4

Method Blank (1) QC Batch: 11652

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	4

Method Blank (1) QC Batch: 11792

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	4

Laboratory Control Spike (LCS-1) QC Batch: 11543

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N [1]	48.7	56.3	mg/L	1	50.0	<4.00	97	14	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11559

[1] lcsd high due to operator error

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	46.2	47.0	mg/L	1	50.0	<4.00	92	2	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11652

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	47.3	51.0	mg/L	1	50.0	<4.00	95	8	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11792

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	42.8	47.3	mg/L	1	50.0	<4.00	86	10	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11543

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	48.7	47.0	mg/L	1	50.0	<4.00	97	4	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11559

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	43.1	42.0	mg/L	1	50.0	<4.00	86	2	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11652

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	40.1	39.2	mg/L	1	50.0	<4.00	80	2	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11792

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	40.0	40.0	mg/L	1	50.0	<4.00	80	0	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11543

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	5.04	101	85 - 115	2004-07-29

Standard (CCV-1) QC Batch: 11543

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.54	91	85 - 115	2004-07-29

Standard (ICV-1) QC Batch: 11559

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.48	90	85 - 115	2004-07-30

Standard (CCV-1) QC Batch: 11559

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.87	97	85 - 115	2004-07-30

Standard (ICV-1) QC Batch: 11652

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.48	90	85 - 115	2004-08-03

Standard (CCV-1) QC Batch: 11652

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.59	92	85 - 115	2004-08-03

Standard (ICV-1) QC Batch: 11792

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.70	94	85 - 115	2004-08-09

Standard (CCV-1) QC Batch: 11792

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.76	95	85 - 115	2004-08-09

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11453	Date Analyzed:	2004-07-27	Analyzed By:	RC
Prep Batch:	10071	Date Prepared:	2004-07-27	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		5.18	mg/L	1	1.00

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11453	Date Analyzed:	2004-07-27	Analyzed By:	RC
Prep Batch:	10071	Date Prepared:	2004-07-27	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		2.45	mg/L	1	1.00

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11622	Date Analyzed:	2004-08-03	Analyzed By:	RC
Prep Batch:	10264	Date Prepared:	2004-08-03	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		1.60	mg/L	1	1.00

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11622	Date Analyzed:	2004-08-03	Analyzed By:	RC
Prep Batch:	10264	Date Prepared:	2004-08-03	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11622	Date Analyzed:	2004-08-03	Analyzed By:	RC
Prep Batch:	10264	Date Prepared:	2004-08-03	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11622	Date Analyzed:	2004-08-03	Analyzed By:	RC
Prep Batch:	10264	Date Prepared:	2004-08-03	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		7.01	mg/L	1	1.00

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11622	Date Analyzed:	2004-08-03	Analyzed By:	RC
Prep Batch:	10264	Date Prepared:	2004-08-03	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		1.04	mg/L	1	1.00

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11622	Date Analyzed:	2004-08-03	Analyzed By:	RC
Prep Batch:	10264	Date Prepared:	2004-08-03	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		1.33	mg/L	1	1.00

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11872	Date Analyzed:	2004-08-11	Analyzed By:	RC
Prep Batch:	10477	Date Prepared:	2004-08-11	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		1.59	mg/L	1	1.00

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11872	Date Analyzed:	2004-08-11	Analyzed By:	RC

Prep Batch: 10477 Date Prepared: 2004-08-11 Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		1.76	mg/L	1	1.00

Method Blank (1) QC Batch: 11453

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Method Blank (1) QC Batch: 11622

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Method Blank (1) QC Batch: 11872

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 11453

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	5.15	5.76	mg/L	1	5.00	<0.382	103	11	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11622

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	4.94	4.76	mg/L	1	5.00	<0.382	99	4	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11872

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	4.58	4.54	mg/L	1	5.00	<0.382	92	1	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11453

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	8.10	10.2	mg/L	1	5.00	2.45	113	23	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11622

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	6.45	6.60	mg/L	1	5.00	1.33	102	2	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11872

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	[1,2]	28.0	27.4	mg/L	1	5.00	16.8	224	2	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11453

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.63	113	85 - 115	2004-07-27

Standard (CCV-1) QC Batch: 11453

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.64	113	85 - 115	2004-07-27

Standard (ICV-1) QC Batch: 11622

[1]Matrix spike recovery out of limits due to sample matrix.
[2]The average of the spike compounds shows that the process is in control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.91	98	85 - 115	2004-08-03

Standard (CCV-1) QC Batch: 11622

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.00	100	85 - 115	2004-08-03

Standard (ICV-1) QC Batch: 11872

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.56	91	85 - 115	2004-08-11

Standard (CCV-1) QC Batch: 11872

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.78	96	85 - 115	2004-08-11

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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 18 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	11469	Date Analyzed:	2004-07-30	Analyzed By:	RR
Prep Batch:	10098	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		0.392	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		5.11	mg/L	1	0.00500
Total Barium		0.0230	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		0.00700	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Iron		0.157	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		1.33	mg/L	1	0.0500
Total Nickel		<0.00500	mg/L	1	0.00500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.208	mg/L	1	0.0100
Total Silica		12.4	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		9.50	mg/L	1	0.0100
Total Vanadium		<0.00500	mg/L	1	0.00500
Total Zinc		<0.0100	mg/L	1	0.0100

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	11469	Date Analyzed:	2004-07-30	Analyzed By:	RR
Prep Batch:	10098	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		2.92	mg/L	1	0.00500
Total Barium		0.0130	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		1.28	mg/L	1	0.00500
Total Copper		0.0310	mg/L	1	0.00500
Total Iron		0.123	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.464	mg/L	1	0.0500

continued . . .

sample 39704 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Nickel		0.0120	mg/L	1	0.00500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.194	mg/L	1	0.0100
Total Silica		30.4	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		9.00	mg/L	1	0.0100
Total Vanadium		0.0250	mg/L	1	0.00500
Total Zinc		0.0100	mg/L	1	0.0100

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	11508	Date Analyzed:	2004-08-02	Analyzed By:	RR
Prep Batch:	10131	Date Prepared:	2004-07-29	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.337	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		4.67	mg/L	1	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.00400	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		0.180	mg/L	1	0.0100
Total Copper		0.0420	mg/L	1	0.0125
Total Iron		0.267	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.352	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		27.2	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		6.32	mg/L	1	0.00500
Total Vanadium		0.0390	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	11508	Date Analyzed:	2004-08-02	Analyzed By:	RR
Prep Batch:	10131	Date Prepared:	2004-07-29	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125

continued . . .

sample 39918 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Aluminum		0.520	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		4.49	mg/L	1	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.00400	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		0.0280	mg/L	1	0.0125
Total Iron		0.365	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.239	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		26.1	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		5.05	mg/L	1	0.00500
Total Vanadium		0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 40248 - HLSF-0143-HMW-013-0704

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.125	mg/L	10	0.0125
Total Aluminum		<1.00	mg/L	10	0.100
Total Arsenic		<0.100	mg/L	10	0.0100
Total Boron		3.76	mg/L	10	0.00500
Total Barium		<1.00	mg/L	10	0.100
Total Beryllium		<0.0250	mg/L	10	0.00250
Total Cadmium		<0.0500	mg/L	10	0.00500
Total Cobalt		<0.200	mg/L	10	0.0200
Total Chromium		<0.100	mg/L	10	0.0100
Total Copper		<0.125	mg/L	10	0.0125
Total Iron		<0.500	mg/L	10	0.0500
Total Manganese		<0.250	mg/L	10	0.0250
Total Molybdenum		<0.500	mg/L	10	0.0500
Total Nickel		<0.250	mg/L	10	0.0250
Total Lead		<0.100	mg/L	10	0.0100
Total Selenium		<0.500	mg/L	10	0.0500
Total Silica		23.6	mg/L	10	0.0500
Total Tin		<0.250	mg/L	10	0.0250
Total Strontium		8.31	mg/L	10	0.00500
Total Vanadium		<0.250	mg/L	10	0.0250
Total Zinc		<0.250	mg/L	10	0.0250

Sample: 40250 - HLSF-0143-HMW-036-0704

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.125	mg/L	10	0.0125
Total Aluminum		<1.00	mg/L	10	0.100
Total Arsenic		<0.100	mg/L	10	0.0100
Total Boron		8.16	mg/L	10	0.00500
Total Barium		<1.00	mg/L	10	0.100
Total Beryllium		<0.0250	mg/L	10	0.00250
Total Cadmium		<0.0500	mg/L	10	0.00500
Total Cobalt		<0.200	mg/L	10	0.0200
Total Chromium		<0.100	mg/L	10	0.0100
Total Copper		<0.125	mg/L	10	0.0125
Total Iron		7.02	mg/L	10	0.0500
Total Manganese		0.616	mg/L	10	0.0250
Total Molybdenum		<0.500	mg/L	10	0.0500
Total Nickel		<0.250	mg/L	10	0.0250
Total Lead		<0.100	mg/L	10	0.0100
Total Selenium		<0.500	mg/L	10	0.0500
Total Silica		20.9	mg/L	10	0.0500
Total Tin		<0.250	mg/L	10	0.0250
Total Strontium		8.67	mg/L	10	0.00500
Total Vanadium		<0.250	mg/L	10	0.0250
Total Zinc		<0.250	mg/L	10	0.0250

Sample: 40252 - HLSF-0143-HMW-037-0704

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.125	mg/L	10	0.0125
Total Aluminum		<1.00	mg/L	10	0.100
Total Arsenic		<0.100	mg/L	10	0.0100
Total Boron		3.56	mg/L	10	0.00500
Total Barium		<1.00	mg/L	10	0.100
Total Beryllium		<0.0250	mg/L	10	0.00250
Total Cadmium		<0.0500	mg/L	10	0.00500
Total Cobalt		<0.200	mg/L	10	0.0200
Total Chromium		<0.100	mg/L	10	0.0100
Total Copper		<0.125	mg/L	10	0.0125
Total Iron		<0.500	mg/L	10	0.0500
Total Manganese		<0.250	mg/L	10	0.0250
Total Molybdenum		<0.500	mg/L	10	0.0500
Total Nickel		<0.250	mg/L	10	0.0250
Total Lead		<0.100	mg/L	10	0.0100
Total Selenium		<0.500	mg/L	10	0.0500
Total Silica		25.0	mg/L	10	0.0500
Total Tin		<0.250	mg/L	10	0.0250
Total Strontium		7.95	mg/L	10	0.00500
Total Vanadium		<0.250	mg/L	10	0.0250
Total Zinc		<0.250	mg/L	10	0.0250

Sample: 40254 - HLSF-0143-HMW-038-0704

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.125	mg/L	10	0.0125
Total Aluminum		<1.00	mg/L	10	0.100
Total Arsenic		<0.100	mg/L	10	0.0100
Total Boron		6.13	mg/L	10	0.00500
Total Barium		<1.00	mg/L	10	0.100
Total Beryllium		<0.0250	mg/L	10	0.00250
Total Cadmium		<0.0500	mg/L	10	0.00500
Total Cobalt		<0.200	mg/L	10	0.0200
Total Chromium		<0.100	mg/L	10	0.0100
Total Copper		<0.125	mg/L	10	0.0125
Total Iron		<0.500	mg/L	10	0.0500
Total Manganese		<0.250	mg/L	10	0.0250
Total Molybdenum		0.528	mg/L	10	0.0500
Total Nickel		<0.250	mg/L	10	0.0250
Total Lead		<0.100	mg/L	10	0.0100
Total Selenium		<0.500	mg/L	10	0.0500
Total Silica		30.3	mg/L	10	0.0500
Total Tin		<0.250	mg/L	10	0.0250
Total Strontium		5.02	mg/L	10	0.00500
Total Vanadium		<0.250	mg/L	10	0.0250
Total Zinc		<0.250	mg/L	10	0.0250

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	11682	Date Analyzed:	2004-08-05	Analyzed By:	RR
Prep Batch:	10295	Date Prepared:	2004-08-04	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		6.37	mg/L	1	0.00500
Total Barium		0.0130	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		0.280	mg/L	1	0.00500
Total Copper		0.00500	mg/L	1	0.00500
Total Iron		<0.0500	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.939	mg/L	1	0.0500
Total Nickel		<0.00500	mg/L	1	0.00500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		33.5	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		6.80	mg/L	1	0.0100

continued . . .

sample 40388 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Vanadium		0.0350	mg/L	1	0.00500
Total Zinc		0.0130	mg/L	1	0.0100

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	11682	Date Analyzed:	2004-08-05	Analyzed By:	RR
Prep Batch:	10295	Date Prepared:	2004-08-04	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		6.39	mg/L	1	0.00500
Total Barium		0.0140	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		0.275	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Iron		0.0990	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.931	mg/L	1	0.0500
Total Nickel		0.00600	mg/L	1	0.00500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		33.4	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		6.76	mg/L	1	0.0100
Total Vanadium		0.0350	mg/L	1	0.00500
Total Zinc		0.0140	mg/L	1	0.0100

Method Blank (1) QC Batch: 11469

Parameter	Flag	Result	Units	RL
Total Silver		<0.00300	mg/L	0.003
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.00500	mg/L	0.005
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.0100	mg/L	0.01
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00100	mg/L	0.001
Total Cobalt		<0.00500	mg/L	0.005
Total Chromium		<0.00500	mg/L	0.005
Total Copper		<0.00500	mg/L	0.005

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.00500	mg/L	0.005
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0100	mg/L	0.01
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.0100	mg/L	0.01
Total Vanadium		<0.00500	mg/L	0.005
Total Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11508

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.100	mg/L	0.1
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00500	mg/L	0.005
Total Cobalt		<0.0200	mg/L	0.02
Total Chromium		<0.0100	mg/L	0.01
Total Copper		<0.0125	mg/L	0.0125
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0250	mg/L	0.025
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0500	mg/L	0.05
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.00500	mg/L	0.005
Total Vanadium		<0.0250	mg/L	0.025
Total Zinc		<0.0250	mg/L	0.025

Method Blank (1) QC Batch: 11682

Parameter	Flag	Result	Units	RL
Total Silver		<0.00300	mg/L	0.003
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.00500	mg/L	0.005
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.0100	mg/L	0.01

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00100	mg/L	0.001
Total Cobalt		<0.00500	mg/L	0.005
Total Chromium		<0.00500	mg/L	0.005
Total Copper		<0.00500	mg/L	0.005
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.00500	mg/L	0.005
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0100	mg/L	0.01
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.0100	mg/L	0.01
Total Vanadium		<0.00500	mg/L	0.005
Total Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11720

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.100	mg/L	0.1
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00500	mg/L	0.005
Total Cobalt		<0.0200	mg/L	0.02
Total Chromium		<0.0100	mg/L	0.01
Total Copper		<0.0125	mg/L	0.0125
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0250	mg/L	0.025
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0500	mg/L	0.05
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.00500	mg/L	0.005
Total Vanadium		<0.0250	mg/L	0.025
Total Zinc		<0.0250	mg/L	0.025

Laboratory Control Spike (LCS-1) QC Batch: 11469

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.124	0.124	mg/L	1	0.125	<0.00274	99	0	85 - 115	20
Total Aluminum		0.977	0.973	mg/L	1	1.00	<0.0133	98	0	85 - 115	20
Total Arsenic		0.495	0.525	mg/L	1	0.500	<0.00489	99	6	85 - 115	20
Total Boron		0.0430	0.0440	mg/L	1	0.0500	<0.00544	86	2	85 - 115	20
Total Barium		1.01	1.00	mg/L	1	1.00	<0.000450	101	1	85 - 114	20
Total Beryllium		0.0240	0.0240	mg/L	1	0.0250	<0.000178	96	0	85 - 115	20
Total Cadmium		0.243	0.239	mg/L	1	0.250	<0.000268	97	2	86 - 115	20
Total Cobalt		0.248	0.251	mg/L	1	0.250	<0.00293	99	1	87 - 113	20
Total Chromium		0.103	0.104	mg/L	1	0.100	<0.00357	103	1	85 - 115	20
Total Copper		0.137	0.136	mg/L	1	0.125	<0.00127	110	1	85 - 113	20
Total Iron		0.496	0.515	mg/L	1	0.500	<0.00220	99	4	85 - 115	20
Total Manganese		0.256	0.255	mg/L	1	0.250	<0.000297	102	0	85 - 110	20
Total Molybdenum		0.519	0.512	mg/L	1	0.500	<0.00690	104	1	85 - 115	20
Total Nickel		0.269	0.268	mg/L	1	0.250	<0.000450	108	0	85 - 112	20
Total Lead		0.516	0.527	mg/L	1	0.500	<0.00698	103	2	86.1 - 112	20
Total Selenium		0.498	0.435	mg/L	1	0.500	<0.00556	100	14	75 - 125	20
Total Silica		0.570	0.562	mg/L	1	0.500	<0.00490	114	1	85 - 115	20
Total Tin	[12]	0.266	0.266	mg/L	1	0.300	<0.00759	89	0	85 - 115	20
Total Strontium		0.0490	0.0490	mg/L	1	0.0500	<0.000281	98	0	85 - 115	20
Total Vanadium		0.258	0.256	mg/L	1	0.250	<0.00105	103	1	85 - 115	20
Total Zinc		0.256	0.252	mg/L	1	0.250	<0.00300	102	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11508

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.128	0.128	mg/L	1	0.125	<0.000199	102	0	85 - 115	20
Total Aluminum		1.01	0.997	mg/L	1	1.00	<0.00984	101	1	85 - 115	20
Total Arsenic		0.493	0.499	mg/L	1	0.500	<0.00860	99	1	85 - 115	20
Total Boron		0.0440	0.0510	mg/L	1	0.0500	<0.00366	88	15	85 - 115	20
Total Barium		1.05	1.06	mg/L	1	1.00	<0.000984	105	1	85 - 115	20
Total Beryllium		0.0245	0.0247	mg/L	1	0.0250	<0.000532	98	1	85 - 115	20
Total Cadmium		0.250	0.251	mg/L	1	0.250	<0.000577	100	0	85 - 115	20
Total Cobalt		0.263	0.265	mg/L	1	0.250	<0.000630	105	1	85 - 115	20
Total Chromium		0.108	0.109	mg/L	1	0.100	<0.000437	108	1	85 - 115	20
Total Copper		0.131	0.132	mg/L	1	0.125	<0.00164	105	1	85 - 115	20
Total Iron		0.547	0.516	mg/L	1	0.500	<0.00281	109	6	85 - 115	20
Total Manganese		0.258	0.259	mg/L	1	0.250	<0.00296	103	0	85 - 115	20
Total Molybdenum		0.527	0.533	mg/L	1	0.500	<0.00118	105	1	85 - 115	20
Total Nickel		0.255	0.257	mg/L	1	0.250	<0.00126	102	1	85 - 115	20
Total Lead		0.513	0.517	mg/L	1	0.500	<0.00310	103	1	85 - 115	20
Total Selenium		0.459	0.462	mg/L	1	0.500	<0.00370	92	1	85 - 115	20
Total Silica		0.505	0.502	mg/L	1	0.500	<0.00632	101	0	85 - 115	20
Total Tin	[34]	0.313	0.317	mg/L	1	0.300	<0.00238	104	1	85 - 115	20
Total Strontium		0.0520	0.0520	mg/L	1	0.0500	<0.000457	104	0	85 - 115	20
Total Vanadium		0.261	0.263	mg/L	1	0.250	<0.000371	104	1	85 - 115	20

continued . . .

[1]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[2]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[3]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[4]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Zinc	0.254	0.255	mg/L	1	0.250	<0.00151	102	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11682

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.123	0.123	mg/L	1	0.125	<0.00274	98	0	85 - 115	20
Total Aluminum	0.953	0.934	mg/L	1	1.00	<0.0133	95	2	85 - 115	20
Total Arsenic	0.477	0.470	mg/L	1	0.500	<0.00489	95	1	85 - 115	20
Total Boron	0.0490	0.0490	mg/L	1	0.0500	<0.00544	98	0	85 - 115	20
Total Barium	0.988	0.987	mg/L	1	1.00	<0.000450	99	0	85 - 114	20
Total Beryllium	0.0260	0.0280	mg/L	1	0.0250	<0.000178	104	7	85 - 115	20
Total Cadmium	0.232	0.234	mg/L	1	0.250	<0.000268	93	1	86 - 115	20
Total Cobalt	0.246	0.248	mg/L	1	0.250	<0.00293	98	1	87 - 113	20
Total Chromium	0.0990	0.0970	mg/L	1	0.100	<0.00357	99	2	85 - 115	20
Total Copper	0.133	0.132	mg/L	1	0.125	<0.00127	106	1	85 - 113	20
Total Iron	0.479	0.477	mg/L	1	0.500	<0.00220	96	0	85 - 115	20
Total Manganese	0.251	0.250	mg/L	1	0.250	<0.000297	100	0	85 - 110	20
Total Molybdenum	0.507	0.503	mg/L	1	0.500	<0.00690	101	1	85 - 115	20
Total Nickel	0.259	0.256	mg/L	1	0.250	<0.000450	104	1	85 - 112	20
Total Lead	0.463	0.456	mg/L	1	0.500	<0.00698	93	2	86.1 - 112	20
Total Selenium	0.436	0.423	mg/L	1	0.500	<0.00556	87	3	75 - 125	20
Total Silica	0.491	0.480	mg/L	1	0.500	<0.00490	98	2	85 - 115	20
Total Tin [5][6]	0.326	0.317	mg/L	1	0.300	<0.00759	109	3	85 - 115	20
Total Strontium	0.0490	0.0490	mg/L	1	0.0500	<0.000281	98	0	85 - 115	20
Total Vanadium	0.251	0.251	mg/L	1	0.250	<0.00105	100	0	85 - 115	20
Total Zinc	0.255	0.255	mg/L	1	0.250	<0.00300	102	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11720

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.132	0.132	mg/L	1	0.125	<0.000199	106	0	85 - 115	20
Total Aluminum	1.03	1.03	mg/L	1	1.00	<0.00984	103	0	85 - 115	20
Total Arsenic	0.510	0.509	mg/L	1	0.500	<0.00860	102	0	85 - 115	20
Total Boron	0.0510	0.0450	mg/L	1	0.0500	<0.00366	102	12	85 - 115	20
Total Barium	1.09	1.09	mg/L	1	1.00	<0.000984	109	0	85 - 115	20
Total Beryllium	0.0260	0.0260	mg/L	1	0.0250	<0.000532	104	0	85 - 115	20
Total Cadmium	0.258	0.259	mg/L	1	0.250	<0.000577	103	0	85 - 115	20
Total Cobalt	0.271	0.270	mg/L	1	0.250	<0.000630	108	0	85 - 115	20
Total Chromium	0.110	0.110	mg/L	1	0.100	<0.000437	110	0	85 - 115	20
Total Copper	0.134	0.134	mg/L	1	0.125	<0.00164	107	0	85 - 115	20
Total Iron	0.545	0.534	mg/L	1	0.500	<0.00281	109	2	85 - 115	20
Total Manganese	0.268	0.266	mg/L	1	0.250	<0.00296	107	1	85 - 115	20

continued . . .

[5]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[6]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.

control spikes continued . . .

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Molybdenum		0.530	0.540	mg/L	1	0.500	<0.00118	106	2	85 - 115	20
Total Nickel		0.262	0.262	mg/L	1	0.250	<0.00126	105	0	85 - 115	20
Total Lead		0.530	0.529	mg/L	1	0.500	<0.00310	106	0	85 - 115	20
Total Selenium		0.477	0.475	mg/L	1	0.500	<0.00370	95	0	85 - 115	20
Total Silica		0.501	0.504	mg/L	1	0.500	<0.00632	100	0	85 - 115	20
Total Tin	[7][8]	0.318	0.321	mg/L	1	0.300	<0.00238	106	1	85 - 115	20
Total Strontium		0.0540	0.0530	mg/L	1	0.0500	<0.000457	108	2	85 - 115	20
Total Vanadium		0.267	0.268	mg/L	1	0.250	<0.000371	107	0	85 - 115	20
Total Zinc		0.263	0.265	mg/L	1	0.250	<0.00151	105	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11469

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.144	0.145	mg/L	1	0.125	<0.00274	115	1	75 - 125	20
Total Aluminum		1.19	1.14	mg/L	1	1.00	<0.0133	119	4	75 - 125	20
Total Arsenic		0.467	0.501	mg/L	1	0.500	<0.00489	93	7	75 - 125	20
Total Boron		0.0500	0.0510	mg/L	1	0.0500	<0.00544	100	2	75 - 125	20
Total Barium		1.07	1.07	mg/L	1	1.00	<0.000450	107	0	75 - 125	20
Total Beryllium		0.0253	0.0249	mg/L	1	0.0250	<0.000178	101	2	75 - 125	20
Total Cadmium		0.247	0.250	mg/L	1	0.250	<0.000268	99	1	75 - 125	20
Total Cobalt		0.258	0.257	mg/L	1	0.250	<0.00293	103	0	75 - 125	20
Total Chromium		0.105	0.107	mg/L	1	0.100	<0.00357	105	2	75 - 125	20
Total Copper		0.133	0.134	mg/L	1	0.125	<0.00127	106	1	75 - 125	20
Total Iron		0.509	0.514	mg/L	1	0.500	<0.00220	102	1	75 - 125	20
Total Manganese		0.236	0.248	mg/L	1	0.250	<0.000297	94	5	75 - 125	20
Total Molybdenum		0.514	0.538	mg/L	1	0.500	<0.00690	103	4	75 - 125	20
Total Nickel		0.270	0.258	mg/L	1	0.250	<0.000450	108	4	75 - 125	20
Total Lead		0.536	0.493	mg/L	1	0.500	<0.00698	107	8	75 - 125	20
Total Selenium		0.441	0.487	mg/L	1	0.500	<0.00556	88	10	75 - 125	20
Total Silica		0.512	0.525	mg/L	1	0.500	<0.00490	102	2	75 - 125	20
Total Tin	[9][10]	0.243	0.295	mg/L	1	0.300	<0.00759	81	19	75 - 125	20
Total Strontium		0.0500	0.0520	mg/L	1	0.0500	<0.000281	100	4	75 - 125	20
Total Vanadium		0.252	0.258	mg/L	1	0.250	<0.00105	101	2	75 - 125	20
Total Zinc		0.253	0.249	mg/L	1	0.250	<0.00300	101	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11508

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.126	0.128	mg/L	1	0.125	<0.000199	101	2	75 - 125	20
Total Aluminum	1.18	1.18	mg/L	1	1.00	<0.00984	118	0	75 - 125	20

continued . . .

[7]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[8]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[9]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[10]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Arsenic		0.470	0.482	mg/L	1	0.500	<0.00860	94	2	75 - 125	20
Total Boron		0.0520	0.0510	mg/L	1	0.0500	<0.00366	104	2	75 - 125	20
Total Barium		0.890	0.892	mg/L	1	1.00	<0.000984	89	0	75 - 125	20
Total Beryllium		0.0256	0.0255	mg/L	1	0.0250	<0.000532	102	0	75 - 125	20
Total Cadmium		0.232	0.233	mg/L	1	0.250	<0.000577	93	0	75 - 125	20
Total Cobalt		0.223	0.222	mg/L	1	0.250	<0.000630	89	0	75 - 125	20
Total Chromium		0.0970	0.0970	mg/L	1	0.100	<0.000437	97	0	75 - 125	20
Total Copper		0.124	0.126	mg/L	1	0.125	<0.00164	99	2	75 - 125	20
Total Iron		0.434	0.440	mg/L	1	0.500	<0.00281	87	1	75 - 125	20
Total Manganese		0.232	0.233	mg/L	1	0.250	<0.00296	93	0	75 - 125	20
Total Molybdenum		0.451	0.462	mg/L	1	0.500	<0.00118	90	2	75 - 125	20
Total Nickel		0.257	0.260	mg/L	1	0.250	<0.00126	103	1	75 - 125	20
Total Lead		0.424	0.433	mg/L	1	0.500	<0.00310	85	2	75 - 125	20
Total Selenium		0.486	0.482	mg/L	1	0.500	<0.00370	97	1	75 - 125	20
Total Silica		0.502	0.504	mg/L	1	0.500	<0.00632	100	0	75 - 125	20
Total Tin	[11][12]	0.292	0.296	mg/L	1	0.300	<0.00238	97	1	75 - 125	20
Total Strontium		0.0540	0.0530	mg/L	1	0.0500	<0.000457	108	2	75 - 125	20
Total Vanadium		0.247	0.257	mg/L	1	0.250	<0.000371	99	4	75 - 125	20
Total Zinc		0.242	0.248	mg/L	1	0.250	<0.00151	97	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11682

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.128	0.131	mg/L	1	0.125	<0.00274	102	2	75 - 125	20
Total Aluminum		1.08	1.06	mg/L	1	1.00	<0.0133	108	2	75 - 125	20
Total Arsenic		0.483	0.491	mg/L	1	0.500	<0.00489	97	2	75 - 125	20
Total Boron		0.0500	0.0480	mg/L	1	0.0500	<0.00544	100	4	75 - 125	20
Total Barium		1.17	1.15	mg/L	1	1.00	<0.000450	117	2	75 - 125	20
Total Beryllium		0.0250	0.0250	mg/L	1	0.0250	<0.000178	100	0	75 - 125	20
Total Cadmium		0.243	0.248	mg/L	1	0.250	<0.000268	97	2	75 - 125	20
Total Cobalt		0.266	0.263	mg/L	1	0.250	<0.00293	106	1	75 - 125	20
Total Chromium		0.107	0.105	mg/L	1	0.100	<0.00357	107	2	75 - 125	20
Total Copper		0.118	0.119	mg/L	1	0.125	<0.00127	94	1	75 - 125	20
Total Iron		0.520	0.512	mg/L	1	0.500	<0.00220	104	2	75 - 125	20
Total Manganese		0.234	0.235	mg/L	1	0.250	<0.000297	94	0	75 - 125	20
Total Molybdenum		0.520	0.512	mg/L	1	0.500	<0.00690	104	2	75 - 125	20
Total Nickel		0.263	0.258	mg/L	1	0.250	<0.000450	105	2	75 - 125	20
Total Lead		0.505	0.515	mg/L	1	0.500	<0.00698	101	2	75 - 125	20
Total Selenium		0.476	0.475	mg/L	1	0.500	<0.00556	95	0	75 - 125	20
Total Silica		0.520	0.512	mg/L	1	0.500	<0.00490	104	2	75 - 125	20
Total Tin	[13][14]	0.361	0.358	mg/L	1	0.300	<0.00759	120	1	75 - 125	20
Total Strontium		0.0520	0.0510	mg/L	1	0.0500	<0.000281	104	2	75 - 125	20
Total Vanadium		0.249	0.252	mg/L	1	0.250	<0.00105	100	1	75 - 125	20
Total Zinc		0.267	0.258	mg/L	1	0.250	<0.00300	107	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[11]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[12]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[13]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[14]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.

Matrix Spike (MS-1) QC Batch: 11720

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.129	0.131	mg/L	1	0.125	<0.000199	103	2	75 - 125	20
Total Aluminum		1.85	1.89	mg/L	1	1.00	0.785	106	2	75 - 125	20
Total Arsenic		0.531	0.556	mg/L	1	0.500	<0.00860	106	4	75 - 125	20
Total Boron	[15][16]	3.87	3.84	mg/L	1	0.0500	3.76	220	1	75 - 125	20
Total Barium		0.988	0.990	mg/L	1	1.00	<0.000984	99	0	75 - 125	20
Total Beryllium		0.0240	0.0240	mg/L	1	0.0250	<0.000532	96	0	75 - 125	20
Total Cadmium		0.238	0.240	mg/L	1	0.250	<0.000577	95	1	75 - 125	20
Total Cobalt		0.249	0.254	mg/L	1	0.250	<0.000630	100	2	75 - 125	20
Total Chromium		0.0980	0.0980	mg/L	1	0.100	0.005	93	0	75 - 125	20
Total Copper		0.146	0.148	mg/L	1	0.125	0.019	102	1	75 - 125	20
Total Iron		0.668	0.666	mg/L	1	0.500	0.222	89	0	75 - 125	20
Total Manganese		0.247	0.247	mg/L	1	0.250	<0.00296	99	0	75 - 125	20
Total Molybdenum		0.709	0.703	mg/L	1	0.500	0.227	96	1	75 - 125	20
Total Nickel		0.239	0.236	mg/L	1	0.250	<0.00126	96	1	75 - 125	20
Total Lead		0.485	0.478	mg/L	1	0.500	<0.00310	97	1	75 - 125	20
Total Selenium		0.488	0.513	mg/L	1	0.500	<0.00370	98	5	75 - 125	20
Total Silica	[17]	23.8	24.2	mg/L	1	0.500	23.6	40	2	75 - 125	20
Total Tin	[18][19]	0.402	0.404	mg/L	1	0.300	0.108	98	0	75 - 125	20
Total Strontium	[20][21]	7.80	7.88	mg/L	1	0.0500	8.31	1020	1	75 - 125	20
Total Vanadium		0.283	0.286	mg/L	1	0.250	0.029	102	1	75 - 125	20
Total Zinc		0.264	0.264	mg/L	1	0.250	0.038	90	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11469

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.119	95	90 - 110	2004-07-30
Total Aluminum		mg/L	1.00	0.945	94	90 - 110	2004-07-30
Total Arsenic		mg/L	1.00	0.974	97	90 - 110	2004-07-30
Total Boron		mg/L	1.00	0.983	98	90 - 110	2004-07-30
Total Barium		mg/L	1.00	0.978	98	90 - 110	2004-07-30
Total Beryllium		mg/L	1.00	0.973	97	90 - 110	2004-07-30
Total Cadmium		mg/L	1.00	0.992	99	90 - 110	2004-07-30
Total Cobalt		mg/L	1.00	0.981	98	90 - 110	2004-07-30
Total Chromium		mg/L	1.00	1.01	101	90 - 110	2004-07-30
Total Copper		mg/L	1.00	0.975	98	90 - 110	2004-07-30
Total Iron		mg/L	1.00	0.987	99	90 - 110	2004-07-30
Total Manganese		mg/L	1.00	0.982	98	90 - 110	2004-07-30
Total Molybdenum		mg/L	1.00	1.05	105	90 - 110	2004-07-30
Total Nickel		mg/L	1.00	0.979	98	90 - 110	2004-07-30
Total Lead		mg/L	1.00	1.01	101	90 - 110	2004-07-30

continued . . .

[15]Matrix spike recovery invalid due to required dilution.
[16]Matrix spike recovery invalid due to required dilution.
[17]Matrix spike recovery invalid due to required dilution.
[18]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[19]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[20]Matrix spike recovery invalid due to required dilution.
[21]Matrix spike recovery invalid due to required dilution.

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Selenium		mg/L	1.00	0.936	94	90 - 110	2004-07-30
Total Silica		mg/L	5.00	4.91	98	90 - 110	2004-07-30
Total Tin		mg/L	1.00	0.993	99	90 - 110	2004-07-30
Total Strontium		mg/L	1.00	0.975	98	90 - 110	2004-07-30
Total Vanadium		mg/L	1.00	0.967	97	90 - 110	2004-07-30
Total Zinc		mg/L	1.00	0.971	97	90 - 110	2004-07-30

Standard (CCV-1) QC Batch: 11469

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.119	95	90 - 110	2004-07-30
Total Aluminum		mg/L	1.00	0.942	94	90 - 110	2004-07-30
Total Arsenic		mg/L	1.00	0.975	98	90 - 110	2004-07-30
Total Boron		mg/L	1.00	0.964	96	90 - 110	2004-07-30
Total Barium		mg/L	1.00	0.971	97	90 - 110	2004-07-30
Total Beryllium		mg/L	1.00	0.959	96	90 - 110	2004-07-30
Total Cadmium		mg/L	1.00	0.985	98	90 - 110	2004-07-30
Total Cobalt		mg/L	1.00	0.976	98	90 - 110	2004-07-30
Total Chromium		mg/L	1.00	0.997	100	90 - 110	2004-07-30
Total Copper		mg/L	1.00	0.960	96	90 - 110	2004-07-30
Total Iron		mg/L	1.00	0.981	98	90 - 110	2004-07-30
Total Manganese		mg/L	1.00	0.969	97	90 - 110	2004-07-30
Total Molybdenum		mg/L	1.00	1.03	103	90 - 110	2004-07-30
Total Nickel		mg/L	1.00	0.973	97	90 - 110	2004-07-30
Total Lead		mg/L	1.00	0.995	100	90 - 110	2004-07-30
Total Selenium		mg/L	1.00	0.930	93	90 - 110	2004-07-30
Total Silica		mg/L	5.00	4.90	98	90 - 110	2004-07-30
Total Tin		mg/L	1.00	0.979	98	90 - 110	2004-07-30
Total Strontium		mg/L	1.00	0.973	97	90 - 110	2004-07-30
Total Vanadium		mg/L	1.00	0.958	96	90 - 110	2004-07-30
Total Zinc		mg/L	1.00	0.957	96	90 - 110	2004-07-30

Standard (ICV-1) QC Batch: 11508

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.125	100	90 - 110	2004-08-02
Total Aluminum		mg/L	1.00	0.988	99	90 - 110	2004-08-02
Total Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-08-02
Total Boron		mg/L	1.00	1.06	106	90 - 110	2004-08-02
Total Barium		mg/L	1.00	0.998	100	90 - 110	2004-08-02
Total Beryllium		mg/L	1.00	0.991	99	90 - 110	2004-08-02
Total Cadmium		mg/L	1.00	1.00	100	90 - 110	2004-08-02
Total Cobalt		mg/L	1.00	0.997	100	90 - 110	2004-08-02
Total Chromium		mg/L	1.00	0.998	100	90 - 110	2004-08-02
Total Copper		mg/L	1.00	1.00	100	90 - 110	2004-08-02

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Iron		mg/L	1.00	0.999	100	90 - 110	2004-08-02
Total Manganese		mg/L	1.00	1.00	100	90 - 110	2004-08-02
Total Molybdenum		mg/L	1.00	1.00	100	90 - 110	2004-08-02
Total Nickel		mg/L	1.00	1.00	100	90 - 110	2004-08-02
Total Lead		mg/L	1.00	1.01	101	90 - 110	2004-08-02
Total Selenium		mg/L	1.00	1.01	101	90 - 110	2004-08-02
Total Silica		mg/L	5.00	4.92	98	90 - 110	2004-08-02
Total Tin		mg/L	1.00	1.01	101	90 - 110	2004-08-02
Total Strontium		mg/L	1.00	1.01	101	90 - 110	2004-08-02
Total Vanadium		mg/L	1.00	0.997	100	90 - 110	2004-08-02
Total Zinc		mg/L	1.00	1.00	100	90 - 110	2004-08-02

Standard (CCV-1) QC Batch: 11508

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.131	105	90 - 110	2004-08-02
Total Aluminum		mg/L	1.00	1.03	103	90 - 110	2004-08-02
Total Arsenic		mg/L	1.00	1.05	105	90 - 110	2004-08-02
Total Boron		mg/L	1.00	1.07	107	90 - 110	2004-08-02
Total Barium		mg/L	1.00	1.04	104	90 - 110	2004-08-02
Total Beryllium		mg/L	1.00	1.05	105	90 - 110	2004-08-02
Total Cadmium		mg/L	1.00	1.05	105	90 - 110	2004-08-02
Total Cobalt		mg/L	1.00	1.05	105	90 - 110	2004-08-02
Total Chromium		mg/L	1.00	1.05	105	90 - 110	2004-08-02
Total Copper		mg/L	1.00	1.06	106	90 - 110	2004-08-02
Total Iron		mg/L	1.00	1.05	105	90 - 110	2004-08-02
Total Manganese		mg/L	1.00	1.05	105	90 - 110	2004-08-02
Total Molybdenum		mg/L	1.00	1.05	105	90 - 110	2004-08-02
Total Nickel		mg/L	1.00	1.05	105	90 - 110	2004-08-02
Total Lead		mg/L	1.00	1.06	106	90 - 110	2004-08-02
Total Selenium		mg/L	1.00	1.07	107	90 - 110	2004-08-02
Total Silica		mg/L	5.00	5.20	104	90 - 110	2004-08-02
Total Tin		mg/L	1.00	1.05	105	90 - 110	2004-08-02
Total Strontium		mg/L	1.00	1.06	106	90 - 110	2004-08-02
Total Vanadium		mg/L	1.00	1.05	105	90 - 110	2004-08-02
Total Zinc		mg/L	1.00	1.05	105	90 - 110	2004-08-02

Standard (ICV-1) QC Batch: 11682

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.119	95	90 - 110	2004-08-05
Total Aluminum		mg/L	1.00	0.987	99	90 - 110	2004-08-05
Total Arsenic		mg/L	1.00	0.988	99	90 - 110	2004-08-05
Total Boron		mg/L	1.00	0.957	96	90 - 110	2004-08-05
Total Barium		mg/L	1.00	0.971	97	90 - 110	2004-08-05

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Beryllium		mg/L	1.00	0.967	97	90 - 110	2004-08-05
Total Cadmium		mg/L	1.00	0.921	92	90 - 110	2004-08-05
Total Cobalt		mg/L	1.00	0.934	93	90 - 110	2004-08-05
Total Chromium		mg/L	1.00	0.971	97	90 - 110	2004-08-05
Total Copper		mg/L	1.00	0.963	96	90 - 110	2004-08-05
Total Iron		mg/L	1.00	0.954	95	90 - 110	2004-08-05
Total Manganese		mg/L	1.00	0.948	95	90 - 110	2004-08-05
Total Molybdenum		mg/L	1.00	1.00	100	90 - 110	2004-08-05
Total Nickel		mg/L	1.00	0.925	92	90 - 110	2004-08-05
Total Lead		mg/L	1.00	1.01	101	90 - 110	2004-08-05
Total Selenium		mg/L	1.00	0.923	92	90 - 110	2004-08-05
Total Silica		mg/L	5.00	4.91	98	90 - 110	2004-08-05
Total Tin		mg/L	1.00	0.917	92	90 - 110	2004-08-05
Total Strontium		mg/L	1.00	0.963	96	90 - 110	2004-08-05
Total Vanadium		mg/L	1.00	0.943	94	90 - 110	2004-08-05
Total Zinc		mg/L	1.00	0.947	95	90 - 110	2004-08-05

Standard (CCV-1) QC Batch: 11682

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.121	97	90 - 110	2004-08-05
Total Aluminum		mg/L	1.00	0.979	98	90 - 110	2004-08-05
Total Arsenic		mg/L	1.00	0.986	99	90 - 110	2004-08-05
Total Boron		mg/L	1.00	0.985	98	90 - 110	2004-08-05
Total Barium		mg/L	1.00	0.973	97	90 - 110	2004-08-05
Total Beryllium		mg/L	1.00	0.984	98	90 - 110	2004-08-05
Total Cadmium		mg/L	1.00	0.967	97	90 - 110	2004-08-05
Total Cobalt		mg/L	1.00	0.968	97	90 - 110	2004-08-05
Total Chromium		mg/L	1.00	0.999	100	90 - 110	2004-08-05
Total Copper		mg/L	1.00	0.978	98	90 - 110	2004-08-05
Total Iron		mg/L	1.00	0.979	98	90 - 110	2004-08-05
Total Manganese		mg/L	1.00	0.970	97	90 - 110	2004-08-05
Total Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-08-05
Total Nickel		mg/L	1.00	0.960	96	90 - 110	2004-08-05
Total Lead		mg/L	1.00	0.985	98	90 - 110	2004-08-05
Total Selenium		mg/L	1.00	0.914	91	90 - 110	2004-08-05
Total Silica		mg/L	5.00	5.05	101	90 - 110	2004-08-05
Total Tin		mg/L	1.00	0.997	100	90 - 110	2004-08-05
Total Strontium		mg/L	1.00	0.977	98	90 - 110	2004-08-05
Total Vanadium		mg/L	1.00	0.967	97	90 - 110	2004-08-05
Total Zinc		mg/L	1.00	0.967	97	90 - 110	2004-08-05

Standard (ICV-1) QC Batch: 11720

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.125	100	90 - 110	2004-08-09
Total Aluminum		mg/L	1.00	0.990	99	90 - 110	2004-08-09
Total Arsenic		mg/L	1.00	1.00	100	90 - 110	2004-08-09
Total Boron		mg/L	1.00	1.04	104	90 - 110	2004-08-09
Total Barium		mg/L	1.00	1.02	102	90 - 110	2004-08-09
Total Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Cadmium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Cobalt		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Chromium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Copper		mg/L	1.00	1.00	100	90 - 110	2004-08-09
Total Iron		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Manganese		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Nickel		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Lead		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Selenium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Silica		mg/L	5.00	4.98	100	90 - 110	2004-08-09
Total Tin		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Strontium		mg/L	1.00	0.998	100	90 - 110	2004-08-09
Total Vanadium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Zinc		mg/L	1.00	1.01	101	90 - 110	2004-08-09

Standard (CCV-1) QC Batch: 11720

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.127	102	90 - 110	2004-08-09
Total Aluminum		mg/L	1.00	1.05	105	90 - 110	2004-08-09
Total Arsenic		mg/L	1.00	0.999	100	90 - 110	2004-08-09
Total Boron		mg/L	1.00	1.02	102	90 - 110	2004-08-09
Total Barium		mg/L	1.00	0.997	100	90 - 110	2004-08-09
Total Beryllium		mg/L	1.00	0.994	99	90 - 110	2004-08-09
Total Cadmium		mg/L	1.00	0.997	100	90 - 110	2004-08-09
Total Cobalt		mg/L	1.00	0.998	100	90 - 110	2004-08-09
Total Chromium		mg/L	1.00	0.997	100	90 - 110	2004-08-09
Total Copper		mg/L	1.00	1.02	102	90 - 110	2004-08-09
Total Iron		mg/L	1.00	0.998	100	90 - 110	2004-08-09
Total Manganese		mg/L	1.00	1.00	100	90 - 110	2004-08-09
Total Molybdenum		mg/L	1.00	0.996	100	90 - 110	2004-08-09
Total Nickel		mg/L	1.00	0.998	100	90 - 110	2004-08-09
Total Lead		mg/L	1.00	0.997	100	90 - 110	2004-08-09
Total Selenium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Silica		mg/L	5.00	5.28	106	90 - 110	2004-08-09
Total Tin		mg/L	1.00	0.995	100	90 - 110	2004-08-09
Total Strontium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Vanadium		mg/L	1.00	1.01	101	90 - 110	2004-08-09
Total Zinc		mg/L	1.00	0.985	98	90 - 110	2004-08-09

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11365	Date Analyzed:	2004-07-26	Analyzed By:	BP
Prep Batch:	10047	Date Prepared:	2004-07-26	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.0	mg/L	0.1	150	87	81.8 - 161

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11365	Date Analyzed:	2004-07-26	Analyzed By:	BP
Prep Batch:	10047	Date Prepared:	2004-07-26	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.4	mg/L	0.1	150	83	81.8 - 161

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11545	Date Analyzed:	2004-07-31	Analyzed By:	BP
Prep Batch:	10173	Date Prepared:	2004-07-30	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.9	mg/L	0.1	150	86	81.8 - 161

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11545	Date Analyzed:	2004-07-31	Analyzed By:	BP
Prep Batch:	10173	Date Prepared:	2004-07-30	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[1]	12.0	mg/L	0.1	150	80	81.8 - 161

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11545	Date Analyzed:	2004-07-31	Analyzed By:	BP
Prep Batch:	10173	Date Prepared:	2004-07-30	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.3	mg/L	0.1	150	89	81.8 - 161

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11545	Date Analyzed:	2004-07-31	Analyzed By:	BP
Prep Batch:	10173	Date Prepared:	2004-07-30	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.8	mg/L	0.1	150	85	81.8 - 161

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11545	Date Analyzed:	2004-07-31	Analyzed By:	BP
Prep Batch:	10173	Date Prepared:	2004-07-30	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

continued . . .

[1]Surrogate recovery out of control chart range but within method limits.

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[2]	11.9	mg/L	0.1	150	79	81.8 - 161

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11545	Date Analyzed:	2004-07-31	Analyzed By:	BP
Prep Batch:	10173	Date Prepared:	2004-07-30	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.9	mg/L	0.1	150	92	81.8 - 161

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11741	Date Analyzed:	2004-08-06	Analyzed By:	BP
Prep Batch:	10359	Date Prepared:	2004-08-06	Prepared By:	BP

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		17.7	mg/L	0.1	150	118	81.8 - 161

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11741	Date Analyzed:	2004-08-06	Analyzed By:	BP
Prep Batch:	10359	Date Prepared:	2004-08-06	Prepared By:	BP

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		17.8	mg/L	0.1	150	119	81.8 - 161

[2]Surrogate recovery out of control chart range but within method limits.

Method Blank (1) QC Batch: 11365

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.0	mg/L	0.1	150	87	81.8 - 161

Method Blank (1) QC Batch: 11545

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.2	mg/L	0.1	150	88	81.8 - 161

Method Blank (1) QC Batch: 11741

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.4	mg/L	0.1	150	96	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 11365

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	26.3	25.7	mg/L	0.1	250	<0.538	105	2	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	13.0	13.0	mg/L	0.1	150	86	86	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 11545

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	24.6	27.4	mg/L	0.1	250	<0.538	99	10	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	12.4	13.5	mg/L	0.1	150	83	90	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 11741

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	23.6	23.8	mg/L	0.1	250	<0.538	94	1	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	14.3	14.5	mg/L	0.1	150	95	96	81.8 - 161

Standard (ICV-1) QC Batch: 11365

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	256	102	68 - 140	2004-07-26

Standard (CCV-1) QC Batch: 11365

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	267	107	68 - 140	2004-07-26

Standard (ICV-1) QC Batch: 11545

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	234	93	68 - 140	2004-07-31

Standard (CCV-1) QC Batch: 11545

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	254	102	68 - 140	2004-07-31

Standard (ICV-1) QC Batch: 11741

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	235	94	68 - 140	2004-08-06

Standard (CCV-1) QC Batch: 11741

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	238	95	68 - 140	2004-08-06

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02

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: 39702 - HLSF-0143-HMW-040-0704

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11382	Date Analyzed:	2004-07-26	Analyzed By:	MS
Prep Batch:	10060	Date Prepared:	2004-07-26	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0870	mg/L	1	0.100	87	70 - 130
4-Bromofluorobenzene (4-BFB)	[1]	0.0689	mg/L	1	0.100	69	70 - 130

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11382	Date Analyzed:	2004-07-26	Analyzed By:	MS
Prep Batch:	10060	Date Prepared:	2004-07-26	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.102	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.104	mg/L	1	0.100	104	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0707	mg/L	1	0.100	71	70 - 130

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11447	Date Analyzed:	2004-07-28	Analyzed By:	MT
Prep Batch:	10119	Date Prepared:	2004-07-28	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0918	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)	[2]	0.0678	mg/L	1	0.100	68	70 - 130

Sample: 39918 - HLSF-0143-HMW-043-0704

[1]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.
[2]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11447	Date Analyzed:	2004-07-28	Analyzed By:	MT
Prep Batch:	10119	Date Prepared:	2004-07-28	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0910	mg/L	1	0.100	91	70 - 130
4-Bromofluorobenzene (4-BFB)	[3]	0.0658	mg/L	1	0.100	66	70 - 130

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11551	Date Analyzed:	2004-08-01	Analyzed By:	MT
Prep Batch:	10207	Date Prepared:	2004-08-01	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0885	mg/L	1	0.100	88	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0915	mg/L	1	0.100	92	70 - 130

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11551	Date Analyzed:	2004-08-01	Analyzed By:	MT
Prep Batch:	10207	Date Prepared:	2004-08-01	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0905	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0954	mg/L	1	0.100	95	70 - 130

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11551	Date Analyzed:	2004-08-01	Analyzed By:	MT
Prep Batch:	10207	Date Prepared:	2004-08-01	Prepared By:	MT

[3]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0903	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0902	mg/L	1	0.100	90	70 - 130

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11551	Date Analyzed:	2004-08-01	Analyzed By:	MT
Prep Batch:	10207	Date Prepared:	2004-08-01	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0925	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0899	mg/L	1	0.100	90	70 - 130

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11660	Date Analyzed:	2004-08-04	Analyzed By:	MS
Prep Batch:	10298	Date Prepared:	2004-08-04	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0927	mg/L	1	0.100	93	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0816	mg/L	1	0.100	82	70 - 130

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11660	Date Analyzed:	2004-08-04	Analyzed By:	MS
Prep Batch:	10298	Date Prepared:	2004-08-04	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0901	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0781	mg/L	1	0.100	78	70 - 130

Method Blank (1) QC Batch: 11382

Parameter	Flag	Result	Units	RL
GRO		0.161	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0879	mg/L	1	0.100	88	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0720	mg/L	1	0.100	72	70 - 130

Method Blank (1) QC Batch: 11447

Parameter	Flag	Result	Units	RL
GRO		0.164	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0934	mg/L	1	0.100	93	70 - 130
4-Bromofluorobenzene (4-BFB)	[4]	0.0685	mg/L	1	0.100	68	70 - 130

Method Blank (1) QC Batch: 11551

Parameter	Flag	Result	Units	RL
GRO		0.200	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0969	mg/L	1	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)		0.101	mg/L	1	0.100	101	70 - 130

Method Blank (1) QC Batch: 11660

Parameter	Flag	Result	Units	RL
GRO		0.174	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0889	mg/L	1	0.100	89	70 - 130

continued . . .

[4]Low surrogate recovery due to prep. ICV/CCV show the method to be in control.

method blank continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		0.0805	mg/L	1	0.100	80	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11382

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	0.824	0.871	mg/L	1	1.00	<0.0261	82	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0902	0.0964	mg/L	1	0.100	90	96	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0860	0.0851	mg/L	1	0.100	86	85	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11447

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	0.772	0.771	mg/L	1	1.00	<0.0261	77	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0941	0.0937	mg/L	1	0.100	94	94	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0815	0.0795	mg/L	1	0.100	82	80	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11551

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	0.950	0.985	mg/L	1	1.00	<0.0261	95	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0994	0.0987	mg/L	1	0.100	99	99	70 - 130
4-Bromofluorobenzene (4-BFB)	0.112	0.111	mg/L	1	0.100	112	111	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11660

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	0.894	0.927	mg/L	1	1.00	<0.0261	89	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0826	0.0944	mg/L	1	0.100	83	94	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0936	0.106	mg/L	1	0.100	94	106	70 - 130

Standard (ICV-1) QC Batch: 11382

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.06	106	85 - 115	2004-07-26

Standard (CCV-1) QC Batch: 11382

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.893	89	85 - 115	2004-07-26

Standard (ICV-1) QC Batch: 11447

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.940	94	85 - 115	2004-07-28

Standard (CCV-1) QC Batch: 11447

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.04	104	85 - 115	2004-07-28

Standard (ICV-1) QC Batch: 11551

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.951	95	85 - 115	2004-08-01

Standard (CCV-1) QC Batch: 11551

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.02	102	85 - 115	2004-08-01

Standard (ICV-1) QC Batch: 11660

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.949	95	85 - 115	2004-08-04

Standard (CCV-1) QC Batch: 11660

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.964	96	85 - 115	2004-08-04

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 31, 2004

Work Order: 4072326

Project Name: HELSTF Chrome
Project Number: 20 FF

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
39702	HLSF-0143-HMW-040-0704	water	2004-07-22	13:51	2004-07-22
39703	HLSF-0143-TB-346	water	2004-07-22	13:51	2004-07-22
39704	HLSF-0143-HMW-041-0704	water	2004-07-22	13:32	2004-07-22
39705	HLSF-0143-TB-347	water	2004-07-22	13:32	2004-07-22
39870	HLSF-0143-HMW-011-0704	water	2004-07-26	14:45	2004-07-26
39871	HLSF-0143-TB-338	water	2004-07-26	14:45	2004-07-26
39918	HLSF-0143-HMW-043-0704	water	2004-07-27	13:30	2004-07-27
39919	HLSF-0143-TB-348	water	2004-07-27	13:30	2004-07-27
40248	HLSF-0143-HMW-013-0704	water	2004-07-29	12:58	2004-07-29
40249	HLSF-0143-TB-339	water	2004-07-29	12:58	2004-07-29
40250	HLSF-0143-HMW-036-0704	water	2004-07-29	11:00	2004-07-29
40251	HLSF-0143-TB-341	water	2004-07-29	11:00	2004-07-29
40252	HLSF-0143-HMW-037-0704	water	2004-07-28	13:05	2004-07-28
40253	HLSF-0143-TB-342	water	2004-07-28	13:05	2004-07-28
40254	HLSF-0143-HMW-038-0704	water	2004-07-28	11:13	2004-07-28
40255	HLSF-0143-TB-343	water	2004-07-28	11:13	2004-07-28
40388	HLSF-0143-HMW-039-0804	water	2004-08-02	11:30	2004-08-02
40389	HLSF-0143-TB-344	water	2004-08-02	11:30	2004-08-02
40390	HLSF-0143-HMW-139-0804	water	2004-08-02	11:30	2004-08-02
40391	HLSF-0143-TB-345	water	2004-08-02	11:30	2004-08-02

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 45 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 39702 - HLSF-0143-HMW-040-0704

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11597	Date Analyzed:	2004-07-28	Analyzed By:	JG
Prep Batch:	10244	Date Prepared:	2004-07-28	Prepared By:	JG

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

continued . . .

sample 39702 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.8	µg/L	1	50.0	108	70 - 130
Toluene-d8		53.2	µg/L	1	50.0	106	70 - 130
4-Bromofluorobenzene (4-BFB)		46.4	µg/L	1	50.0	93	70 - 130

Sample: 39703 - HLSF-0143-TB-346

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11597	Date Analyzed:	2004-07-28	Analyzed By:	JG
Prep Batch:	10244	Date Prepared:	2004-07-28	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		22.7	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00

continued . . .

sample 39703 continued . . .

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

continued . . .

sample 39703 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.9	µg/L	1	50.0	106	70 - 130
Toluene-d8		52.9	µg/L	1	50.0	106	70 - 130
4-Bromofluorobenzene (4-BFB)		46.8	µg/L	1	50.0	94	70 - 130

Sample: 39704 - HLSF-0143-HMW-041-0704

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11522	Date Analyzed:	2004-07-30	Analyzed By:	JG
Prep Batch:	10183	Date Prepared:	2004-07-30	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<5.00	µg/L	5	1.00
Dichlorodifluoromethane		<5.00	µg/L	5	1.00
Chloromethane (methyl chloride)		<5.00	µg/L	5	1.00
Vinyl Chloride		<5.00	µg/L	5	1.00
Bromomethane (methyl bromide)		<25.0	µg/L	5	5.00
Chloroethane		<5.00	µg/L	5	1.00
Trichlorofluoromethane		<5.00	µg/L	5	1.00
Acetone		<50.0	µg/L	5	10.0
Iodomethane (methyl iodide)		<25.0	µg/L	5	5.00
Carbon Disulfide		<5.00	µg/L	5	1.00
Acrylonitrile		<5.00	µg/L	5	1.00
2-Butanone (MEK)		<25.0	µg/L	5	5.00
4-Methyl-2-pentanone (MIBK)		<25.0	µg/L	5	5.00
2-Hexanone		<25.0	µg/L	5	5.00
trans 1,4-Dichloro-2-butene		<50.0	µg/L	5	10.0
1,1-Dichloroethene		<5.00	µg/L	5	1.00
Methylene chloride		<25.0	µg/L	5	5.00
MTBE		<5.00	µg/L	5	1.00
trans-1,2-Dichloroethene		<5.00	µg/L	5	1.00
1,1-Dichloroethane		<5.00	µg/L	5	1.00
cis-1,2-Dichloroethene		<5.00	µg/L	5	1.00
2,2-Dichloropropane		<5.00	µg/L	5	1.00
1,2-Dichloroethane (EDC)		<5.00	µg/L	5	1.00
Chloroform		<5.00	µg/L	5	1.00
1,1,1-Trichloroethane		<5.00	µg/L	5	1.00
1,1-Dichloropropene		<5.00	µg/L	5	1.00

continued . . .

sample 39704 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<5.00	µg/L	5	1.00
Carbon Tetrachloride		<5.00	µg/L	5	1.00
1,2-Dichloropropane		<5.00	µg/L	5	1.00
Trichloroethene (TCE)		202	µg/L	5	1.00
Dibromomethane (methylene bromide)		<5.00	µg/L	5	1.00
Bromodichloromethane		<5.00	µg/L	5	1.00
2-Chloroethyl vinyl ether		<25.0	µg/L	5	5.00
cis-1,3-Dichloropropene		<5.00	µg/L	5	1.00
trans-1,3-Dichloropropene		<5.00	µg/L	5	1.00
Toluene		<5.00	µg/L	5	1.00
1,1,2-Trichloroethane		<5.00	µg/L	5	1.00
1,3-Dichloropropane		<5.00	µg/L	5	1.00
Dibromochloromethane		<5.00	µg/L	5	1.00
1,2-Dibromoethane (EDB)		<5.00	µg/L	5	1.00
Tetrachloroethene (PCE)		<5.00	µg/L	5	1.00
Chlorobenzene		<5.00	µg/L	5	1.00
1,1,1,2-Tetrachloroethane		<5.00	µg/L	5	1.00
Ethylbenzene		<5.00	µg/L	5	1.00
m,p-Xylene		<5.00	µg/L	5	1.00
Bromoform		<5.00	µg/L	5	1.00
Styrene		<5.00	µg/L	5	1.00
o-Xylene		<5.00	µg/L	5	1.00
1,1,2,2-Tetrachloroethane		<5.00	µg/L	5	1.00
2-Chlorotoluene		<5.00	µg/L	5	1.00
1,2,3-Trichloropropane		<5.00	µg/L	5	1.00
Isopropylbenzene		<5.00	µg/L	5	1.00
Bromobenzene		<5.00	µg/L	5	1.00
n-Propylbenzene		<5.00	µg/L	5	1.00
1,3,5-Trimethylbenzene		<5.00	µg/L	5	1.00
tert-Butylbenzene		<5.00	µg/L	5	1.00
1,2,4-Trimethylbenzene		<5.00	µg/L	5	1.00
1,4-Dichlorobenzene (para)		<5.00	µg/L	5	1.00
sec-Butylbenzene		<5.00	µg/L	5	1.00
1,3-Dichlorobenzene (meta)		<5.00	µg/L	5	1.00
p-Isopropyltoluene		<5.00	µg/L	5	1.00
4-Chlorotoluene		<5.00	µg/L	5	1.00
1,2-Dichlorobenzene (ortho)		<5.00	µg/L	5	1.00
n-Butylbenzene		<5.00	µg/L	5	1.00
1,2-Dibromo-3-chloropropane		<25.0	µg/L	5	5.00
1,2,3-Trichlorobenzene		<25.0	µg/L	5	5.00
1,2,4-Trichlorobenzene		<25.0	µg/L	5	5.00
Naphthalene		<25.0	µg/L	5	5.00
Hexachlorobutadiene		<25.0	µg/L	5	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.3	µg/L	1	50.0	105	70 - 130
Toluene-d8		52.6	µg/L	1	50.0	105	70 - 130
4-Bromofluorobenzene (4-BFB)		46.4	µg/L	1	50.0	93	70 - 130

Sample: 39705 - HLSF-0143-TB-347

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11597	Date Analyzed:	2004-07-28	Analyzed By:	JG
Prep Batch:	10244	Date Prepared:	2004-07-28	Prepared By:	JG

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

continued . . .

sample 39705 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.5	µg/L	1	50.0	109	70 - 130
Toluene-d8		53.1	µg/L	1	50.0	106	70 - 130
4-Bromofluorobenzene (4-BFB)		45.9	µg/L	1	50.0	92	70 - 130

Sample: 39870 - HLSF-0143-HMW-011-0704

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11522	Date Analyzed:	2004-07-30	Analyzed By:	JG
Prep Batch:	10183	Date Prepared:	2004-07-30	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		1.70	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00

continued . . .

sample 39870 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		1.86	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		1.40	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		42.2	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
Isopropylbenzene		<1.00	µg/L	1	1.00
Bromobenzene		<1.00	µg/L	1	1.00
n-Propylbenzene		<1.00	µg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1.00
tert-Butylbenzene		<1.00	µg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1.00
sec-Butylbenzene		<1.00	µg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1	1.00
p-Isopropyltoluene		<1.00	µg/L	1	1.00
4-Chlorotoluene		<1.00	µg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1.00

continued . . .

sample 39870 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
n-Butylbenzene		<1.00	µg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5.00
Naphthalene		<5.00	µg/L	1	5.00
Hexachlorobutadiene		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.9	µg/L	1	50.0	108	70 - 130
Toluene-d8		52.5	µg/L	1	50.0	105	70 - 130
4-Bromofluorobenzene (4-BFB)		45.8	µg/L	1	50.0	92	70 - 130

Sample: 39871 - HLSF-0143-TB-338

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11522	Date Analyzed:	2004-07-30	Analyzed By:	JG
Prep Batch:	10183	Date Prepared:	2004-07-30	Prepared By:	JG

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

continued . . .

sample 39871 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.0	μg/L	1	50.0	106	70 - 130
Toluene-d8		51.8	μg/L	1	50.0	104	70 - 130
4-Bromofluorobenzene (4-BFB)		45.2	μg/L	1	50.0	90	70 - 130

Sample: 39918 - HLSF-0143-HMW-043-0704

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11522	Date Analyzed:	2004-07-30	Analyzed By:	JG
Prep Batch:	10183	Date Prepared:	2004-07-30	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		1.91	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00

continued . . .

sample 39918 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.1	μg/L	1	50.0	106	70 - 130
Toluene-d8		52.2	μg/L	1	50.0	104	70 - 130
4-Bromofluorobenzene (4-BFB)		45.5	μg/L	1	50.0	91	70 - 130

Sample: 39919 - HLSF-0143-TB-348

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11522	Date Analyzed:	2004-07-30	Analyzed By:	JG
Prep Batch:	10183	Date Prepared:	2004-07-30	Prepared By:	JG

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

continued . . .

sample 39919 continued . . .

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

continued . . .

sample 39919 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.5	μg/L	1	50.0	107	70 - 130
Toluene-d8		52.1	μg/L	1	50.0	104	70 - 130
4-Bromofluorobenzene (4-BFB)		46.0	μg/L	1	50.0	92	70 - 130

Sample: 40248 - HLSF-0143-HMW-013-0704

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11628	Date Analyzed:	2004-08-03	Analyzed By:	JG
Prep Batch:	10269	Date Prepared:	2004-08-03	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		<1.00	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		1.07	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00

continued . . .

sample 40248 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.6	μg/L	1	50.0	101	70 - 130
Toluene-d8		45.3	μg/L	1	50.0	91	70 - 130
4-Bromofluorobenzene (4-BFB)		44.3	μg/L	1	50.0	89	70 - 130

Sample: 40249 - HLSF-0143-TB-339

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11628	Date Analyzed:	2004-08-03	Analyzed By:	JG

Prep Batch: 10269 Date Prepared: 2004-08-03 Prepared By: JG

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

continued . . .

sample 40249 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.5	µg/L	1	50.0	101	70 - 130
Toluene-d8		45.1	µg/L	1	50.0	90	70 - 130
4-Bromofluorobenzene (4-BFB)		44.5	µg/L	1	50.0	89	70 - 130

Sample: 40250 - HLSF-0143-HMW-036-0704

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11628	Date Analyzed:	2004-08-03	Analyzed By:	JG
Prep Batch:	10269	Date Prepared:	2004-08-03	Prepared By:	JG

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

continued . . .

sample 40250 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		4.60	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		1.39	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		1.72	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00

continued . . .

sample 40250 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.7	μg/L	1	50.0	101	70 - 130
Toluene-d8		44.6	μg/L	1	50.0	89	70 - 130
4-Bromofluorobenzene (4-BFB)		43.7	μg/L	1	50.0	87	70 - 130

Sample: 40251 - HLSF-0143-TB-341

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11628	Date Analyzed:	2004-08-03	Analyzed By:	JG
Prep Batch:	10269	Date Prepared:	2004-08-03	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		22.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		1.69	μg/L	1	1.00
Methylene chloride		13.6	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00

continued . . .

sample 40251 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.2	µg/L	1	50.0	102	70 - 130
Toluene-d8		45.6	µg/L	1	50.0	91	70 - 130
4-Bromofluorobenzene (4-BFB)		44.8	µg/L	1	50.0	90	70 - 130

Sample: 40252 - HLSF-0143-HMW-037-0704

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11628	Date Analyzed:	2004-08-03	Analyzed By:	JG
Prep Batch:	10269	Date Prepared:	2004-08-03	Prepared By:	JG

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

continued . . .

sample 40252 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.2	µg/L	1	50.0	100	70 - 130
Toluene-d8		44.3	µg/L	1	50.0	89	70 - 130
4-Bromofluorobenzene (4-BFB)		43.0	µg/L	1	50.0	86	70 - 130

Sample: 40253 - HLSF-0143-TB-342

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11628	Date Analyzed:	2004-08-03	Analyzed By:	JG
Prep Batch:	10269	Date Prepared:	2004-08-03	Prepared By:	JG

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

continued . . .

sample 40253 continued . . .

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

continued . . .

sample 40253 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.3	μg/L	1	50.0	103	70 - 130
Toluene-d8		44.8	μg/L	1	50.0	90	70 - 130
4-Bromofluorobenzene (4-BFB)		44.3	μg/L	1	50.0	89	70 - 130

Sample: 40254 - HLSF-0143-HMW-038-0704

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11628	Date Analyzed:	2004-08-03	Analyzed By:	JG
Prep Batch:	10269	Date Prepared:	2004-08-03	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		<1.00	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		10.8	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00

continued . . .

sample 40254 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.2	μg/L	1	50.0	102	70 - 130
Toluene-d8		45.0	μg/L	1	50.0	90	70 - 130
4-Bromofluorobenzene (4-BFB)		44.2	μg/L	1	50.0	88	70 - 130

Sample: 40255 - HLSF-0143-TB-343

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11628	Date Analyzed:	2004-08-03	Analyzed By:	JG
Prep Batch:	10269	Date Prepared:	2004-08-03	Prepared By:	JG

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

continued . . .

sample 40255 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.4	µg/L	1	50.0	105	70 - 130
Toluene-d8		45.7	µg/L	1	50.0	91	70 - 130
4-Bromofluorobenzene (4-BFB)		44.7	µg/L	1	50.0	89	70 - 130

Sample: 40388 - HLSF-0143-HMW-039-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11664	Date Analyzed:	2004-08-04	Analyzed By:	JG
Prep Batch:	10301	Date Prepared:	2004-08-04	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		1.59	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00

continued . . .

sample 40388 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		1.01	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		67.1	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
Isopropylbenzene		<1.00	µg/L	1	1.00
Bromobenzene		<1.00	µg/L	1	1.00
n-Propylbenzene		<1.00	µg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1.00
tert-Butylbenzene		<1.00	µg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1.00
1,4-Dichlorobenzene (para)		2.91	µg/L	1	1.00
sec-Butylbenzene		<1.00	µg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1	1.00
p-Isopropyltoluene		<1.00	µg/L	1	1.00
4-Chlorotoluene		<1.00	µg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1.00
n-Butylbenzene		<1.00	µg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5.00
Naphthalene		<5.00	µg/L	1	5.00

continued . . .

sample 40388 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.6	μg/L	1	50.0	105	70 - 130
Toluene-d8		44.7	μg/L	1	50.0	89	70 - 130
4-Bromofluorobenzene (4-BFB)		43.8	μg/L	1	50.0	88	70 - 130

Sample: 40389 - HLSF-0143-TB-344

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11664	Date Analyzed:	2004-08-04	Analyzed By:	JG
Prep Batch:	10301	Date Prepared:	2004-08-04	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		21.1	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		1.46	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00

continued . . .

sample 40389 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.8	μg/L	1	50.0	106	70 - 130
Toluene-d8		44.8	μg/L	1	50.0	90	70 - 130
4-Bromofluorobenzene (4-BFB)		43.7	μg/L	1	50.0	87	70 - 130

Sample: 40390 - HLSF-0143-HMW-139-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11664	Date Analyzed:	2004-08-04	Analyzed By:	JG
Prep Batch:	10301	Date Prepared:	2004-08-04	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		1.65	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		67.7	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		<1.00	μg/L	1	1.00

continued . . .

sample 40390 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.4	µg/L	1	50.0	105	70 - 130
Toluene-d8		44.5	µg/L	1	50.0	89	70 - 130
4-Bromofluorobenzene (4-BFB)		43.3	µg/L	1	50.0	87	70 - 130

Sample: 40391 - HLSF-0143-TB-345

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11664	Date Analyzed:	2004-08-04	Analyzed By:	JG
Prep Batch:	10301	Date Prepared:	2004-08-04	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		20.6	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		3.59	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00

continued . . .

sample 40391 continued . . .

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

continued . . .

sample 40391 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.9	μg/L	1	50.0	106	70 - 130
Toluene-d8		44.8	μg/L	1	50.0	90	70 - 130
4-Bromofluorobenzene (4-BFB)		43.3	μg/L	1	50.0	87	70 - 130

Method Blank (1) QC Batch: 11522

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.5	μg/L	1	50.0	103	70 - 130
Toluene-d8		51.8	μg/L	1	50.0	104	70 - 130
4-Bromofluorobenzene (4-BFB)		46.8	μg/L	1	50.0	94	70 - 130

Method Blank (1) QC Batch: 11597

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
1,3-Dichlorobenzene (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.1	μg/L	1	50.0	104	70 - 130
Toluene-d8		52.8	μg/L	1	50.0	106	70 - 130
4-Bromofluorobenzene (4-BFB)		47.5	μg/L	1	50.0	95	70 - 130

Method Blank (1) QC Batch: 11628

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.9	μg/L	1	50.0	102	70 - 130
Toluene-d8		45.8	μg/L	1	50.0	92	70 - 130
4-Bromofluorobenzene (4-BFB)		45.8	μg/L	1	50.0	92	70 - 130

Method Blank (1) QC Batch: 11664

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.6	μg/L	1	50.0	103	70 - 130
Toluene-d8		45.1	μg/L	1	50.0	90	70 - 130
4-Bromofluorobenzene (4-BFB)		43.5	μg/L	1	50.0	87	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11522

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	99.1	98.8	μg/L	1	100	0.14	99	0	70 - 130	20
Benzene	101	101	μg/L	1	100	<0.146	101	0	70 - 130	20
Trichloroethene (TCE)	98.7	98.7	μg/L	1	100	0.13	99	0	70 - 130	20
Toluene	99.8	101	μg/L	1	100	0.17	100	1	70 - 130	20
Chlorobenzene	102	102	μg/L	1	100	<0.0540	102	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.8	50.8	μg/L	1	50.0	102	102	70 - 130
Toluene-d8	51.6	52.0	μg/L	1	50.0	103	104	70 - 130
4-Bromofluorobenzene (4-BFB)	48.3	47.9	μg/L	1	50.0	97	96	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11597

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	94.5	96.4	μg/L	1	100	<0.136	94	2	70 - 130	20
Benzene	99.4	100	μg/L	1	100	<0.146	99	1	70 - 130	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Trichloroethene (TCE)	97.8	99.2	μg/L	1	100	0.13	98	1	70 - 130	20
Toluene	98.6	99.6	μg/L	1	100	0.19	99	1	70 - 130	20
Chlorobenzene	100	102	μg/L	1	100	<0.0540	100	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.6	50.8	μg/L	1	50.0	101	102	70 - 130
Toluene-d8	52.9	52.8	μg/L	1	50.0	106	106	70 - 130
4-Bromofluorobenzene (4-BFB)	49.1	48.6	μg/L	1	50.0	98	97	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11628

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	88.2	86.1	μg/L	1	100	<0.136	88	2	70 - 130	20
Benzene	93.9	93.2	μg/L	1	100	<0.146	94	1	70 - 130	20
Trichloroethene (TCE)	92.7	92.6	μg/L	1	100	<0.117	93	0	70 - 130	20
Toluene	94.1	93.9	μg/L	1	100	<0.0600	94	0	70 - 130	20
Chlorobenzene	95.2	94.9	μg/L	1	100	<0.0540	95	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.0	50.0	μg/L	1	50.0	100	100	70 - 130
Toluene-d8	46.8	46.2	μg/L	1	50.0	94	92	70 - 130
4-Bromofluorobenzene (4-BFB)	46.5	45.4	μg/L	1	50.0	93	91	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11664

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	85.4	85.4	μg/L	1	100	<0.136	85	0	70 - 130	20
Benzene	91.9	93.0	μg/L	1	100	<0.146	92	1	70 - 130	20
Trichloroethene (TCE)	89.3	90.0	μg/L	1	100	<0.117	89	1	70 - 130	20
Toluene	92.0	92.5	μg/L	1	100	<0.0600	92	0	70 - 130	20
Chlorobenzene	93.5	94.3	μg/L	1	100	<0.0540	94	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.9	51.1	μg/L	1	50.0	102	102	70 - 130
Toluene-d8	45.1	45.2	μg/L	1	50.0	90	90	70 - 130
4-Bromofluorobenzene (4-BFB)	44.2	44.0	μg/L	1	50.0	88	88	70 - 130

Matrix Spike (MS-1) QC Batch: 11522

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	105	104	µg/L	1	100	<0.136	105	1	70 - 130	20
Benzene	104	105	µg/L	1	100	<0.146	104	1	70 - 130	20
Trichloroethene (TCE)	99.0	99.4	µg/L	1	100	<0.117	99	0	70 - 130	20
Toluene	104	104	µg/L	1	100	<0.0600	104	0	70 - 130	20
Chlorobenzene	105	104	µg/L	1	100	<0.0540	105	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	52.8	52.9	µg/L	1	50	106	106	70 - 130
Toluene-d8	51.4	51.2	µg/L	1	50	103	102	70 - 130
4-Bromofluorobenzene (4-BFB)	45.6	45.6	µg/L	1	50	91	91	70 - 130

Matrix Spike (MS-1) QC Batch: 11628

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	87.2	85.3	µg/L	1	100	<0.136	87	2	70 - 130	20
Benzene	93.0	91.5	µg/L	1	100	<0.146	93	2	70 - 130	20
Trichloroethene (TCE)	89.9	88.8	µg/L	1	100	<0.117	90	1	70 - 130	20
Toluene	92.9	92.0	µg/L	1	100	<0.0600	93	1	70 - 130	20
Chlorobenzene	94.9	94.2	µg/L	1	100	<0.0540	95	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	51.4	51.4	µg/L	1	50	103	103	70 - 130
Toluene-d8	45.4	44.3	µg/L	1	50	91	89	70 - 130
4-Bromofluorobenzene (4-BFB)	44.9	43.7	µg/L	1	50	90	87	70 - 130

Matrix Spike (MS-1) QC Batch: 11664

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	88.3	89.7	µg/L	1	100	<0.136	88	2	70 - 130	20
Benzene	93.4	94.6	µg/L	1	100	<0.146	93	1	70 - 130	20
Trichloroethene (TCE)	152	153	µg/L	1	100	67.1	85	1	70 - 130	20
Toluene	93.2	94.4	µg/L	1	100	<0.0600	93	1	70 - 130	20
Chlorobenzene	95.0	95.8	µg/L	1	100	<0.0540	95	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	52.4	52.3	µg/L	1	50	105	105	70 - 130
Toluene-d8	45.2	44.7	µg/L	1	50	90	89	70 - 130
4-Bromofluorobenzene (4-BFB)	44.2	44.1	µg/L	1	50	88	88	70 - 130

Standard (CCV-1) QC Batch: 11522

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	52.7	105	80 - 120	2004-07-30
1,1-Dichloroethene		µg/L	50.0	47.2	94	80 - 120	2004-07-30
Chloroform		µg/L	50.0	53.1	106	80 - 120	2004-07-30
1,2-Dichloropropane		µg/L	50.0	60.1	120	80 - 120	2004-07-30
Toluene		µg/L	50.0	52.7	105	80 - 120	2004-07-30
Chlorobenzene		µg/L	50.0	51.6	103	80 - 120	2004-07-30
Ethylbenzene		µg/L	50.0	56.5	113	80 - 120	2004-07-30

Standard (CCV-1) QC Batch: 11597

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	49.3	99	80 - 120	2004-07-28
1,1-Dichloroethene		µg/L	50.0	45.1	90	80 - 120	2004-07-28
Chloroform		µg/L	50.0	51.2	102	80 - 120	2004-07-28
1,2-Dichloropropane		µg/L	50.0	57.1	114	80 - 120	2004-07-28
Toluene		µg/L	50.0	51.1	102	80 - 120	2004-07-28
Chlorobenzene		µg/L	50.0	51.2	102	80 - 120	2004-07-28
Ethylbenzene		µg/L	50.0	55.1	110	80 - 120	2004-07-28

Standard (CCV-1) QC Batch: 11628

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	43.7	87	80 - 120	2004-08-03
1,1-Dichloroethene		µg/L	50.0	42.0	84	80 - 120	2004-08-03
Chloroform		µg/L	50.0	45.8	92	80 - 120	2004-08-03
1,2-Dichloropropane		µg/L	50.0	47.9	96	80 - 120	2004-08-03
Toluene		µg/L	50.0	48.3	97	80 - 120	2004-08-03
Chlorobenzene		µg/L	50.0	48.8	98	80 - 120	2004-08-03
Ethylbenzene		µg/L	50.0	45.8	92	80 - 120	2004-08-03

Standard (CCV-1) QC Batch: 11664

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	44.5	89	80 - 120	2004-08-04
1,1-Dichloroethene		µg/L	50.0	42.1	84	80 - 120	2004-08-04
Chloroform		µg/L	50.0	46.5	93	80 - 120	2004-08-04
1,2-Dichloropropane		µg/L	50.0	48.2	96	80 - 120	2004-08-04
Toluene		µg/L	50.0	47.3	95	80 - 120	2004-08-04
Chlorobenzene		µg/L	50.0	48.3	97	80 - 120	2004-08-04
Ethylbenzene		µg/L	50.0	44.1	88	80 - 120	2004-08-04

Work Order Receipt

Order

Work Order	4030421
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 GG
	Project Name = HLSTF Diesel Spill
	Project Number = 20 GG
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28645	HLSF-0154-DRW-003-0304	Normal	water	2004-03-03	12:56	20
28646	HLSF-0154-TB-213	Normal	water	2004-03-03	12:56	2

Sample	Test	Method	Prep	Priority	Due Date
28645	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ag, Total	S 6010B	S 3010A	Normal	2004-03-04
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Al, Total	S 6010B	S 3010A	Normal	2004-03-04
	Alkalinity	SM 2320B	N/A	Normal	2004-03-04
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-03-04
	As, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	As, Total	S 6010B	S 3010A	Normal	2004-03-04
	B, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	B, Total	S 6010B	S 3010A	Normal	2004-03-04
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ba, Total	S 6010B	S 3010A	Normal	2004-03-04
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Be, Total	S 6010B	S 3010A	Normal	2004-03-04
	Bromide (IC)	E 300.0	N/A	Normal	2004-03-04
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cd, Total	S 6010B	S 3010A	Normal	2004-03-04
	Chloride (IC)	E 300.0	N/A	Normal	2004-03-04
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-03-04
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Co, Total	S 6010B	S 3010A	Normal	2004-03-04
	Conductivity	SM 2510B	N/A	Normal	2004-03-04
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cr, Total	S 6010B	S 3010A	Normal	2004-03-04
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cu, Total	S 6010B	S 3010A	Normal	2004-03-04
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-03-04
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Fe, Total	S 6010B	S 3010A	Normal	2004-03-04
	Fluoride (IC)	E 300.0	N/A	Normal	2004-03-04
	Hg, Total	S 7470A	N/A	Normal	2004-03-04
	K, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mn, Total	S 6010B	S 3010A	Normal	2004-03-04
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mo, Total	S 6010B	S 3010A	Normal	2004-03-04

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-03-04
	NO3 (IC)	E 300.0	N/A	Normal	2004-03-04
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ni, Total	S 6010B	S 3010A	Normal	2004-03-04
	P, Total	S 6010B	S 3010A	Normal	2004-03-04
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Pb, Total	S 6010B	S 3010A	Normal	2004-03-04
	SO4 (IC)	E 300.0	N/A	Normal	2004-03-04
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Se, Total	S 6010B	S 3010A	Normal	2004-03-04
	Semivolatiles	S 8270C	S 3510C	Normal	2004-03-04
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Si, Total	S 6010B	S 3010A	Normal	2004-03-04
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Sn, Total	S 6010B	S 3010A	Normal	2004-03-04
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Sr, Total	S 6010B	S 3010A	Normal	2004-03-04
	TDS	SM 2540C	N/A	Normal	2004-03-04
	TKN	E 351.3	N/A	Normal	2004-03-04
	TOC	E 415.1	N/A	Normal	2004-03-04
	TPH DRO	Mod. 8015B	N/A	Normal	2004-03-04
	TPH GRO	S 8015B	S 5030B	Normal	2004-03-04
	V, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	V, Total	S 6010B	S 3010A	Normal	2004-03-04
	Volatiles	S 8260B	S 5030B	Normal	2004-03-04
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Zn, Total	S 6010B	S 3010A	Normal	2004-03-04
	pH	SM 4500-H+	N/A	Normal	2004-03-04
28646	Volatiles	S 8260B	S 5030B	Normal	2004-03-04 13:50:00.862353-06

Work Order Receipt

Order

Work Order	4030422
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 GG
	Project Name = HLSTF Diesel Spill
	Project Number = 20 GG
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28647	HLSF-0164-DRW-103-0304	Normal	water	2004-03-03	12:56	20
28648	HLSF-0154-TB-214	Normal	water	2004-03-03	12:56	2

Sample	Test	Method	Prep	Priority	Due Date
28647	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ag, Total	S 6010B	S 3010A	Normal	2004-03-04
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Al, Total	S 6010B	S 3010A	Normal	2004-03-04
	Alkalinity	SM 2320B	N/A	Normal	2004-03-04
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-03-04
	As, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	As, Total	S 6010B	S 3010A	Normal	2004-03-04
	B, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	B, Total	S 6010B	S 3010A	Normal	2004-03-04
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ba, Total	S 6010B	S 3010A	Normal	2004-03-04
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Be, Total	S 6010B	S 3010A	Normal	2004-03-04
	Bromide (IC)	E 300.0	N/A	Normal	2004-03-04
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cd, Total	S 6010B	S 3010A	Normal	2004-03-04
	Chloride (IC)	E 300.0	N/A	Normal	2004-03-04
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-03-04
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Co, Total	S 6010B	S 3010A	Normal	2004-03-04
	Conductivity	SM 2510B	N/A	Normal	2004-03-04
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cr, Total	S 6010B	S 3010A	Normal	2004-03-04
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cu, Total	S 6010B	S 3010A	Normal	2004-03-04
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-03-04
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Fe, Total	S 6010B	S 3010A	Normal	2004-03-04
	Fluoride (IC)	E 300.0	N/A	Normal	2004-03-04
	Hg, Total	S 7470A	N/A	Normal	2004-03-04
	K, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mn, Total	S 6010B	S 3010A	Normal	2004-03-04
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mo, Total	S 6010B	S 3010A	Normal	2004-03-04

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-03-04
	NO3 (IC)	E 300.0	N/A	Normal	2004-03-04
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ni, Total	S 6010B	S 3010A	Normal	2004-03-04
	P, Total	S 6010B	S 3010A	Normal	2004-03-04
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Pb, Total	S 6010B	S 3010A	Normal	2004-03-04
	SO4 (IC)	E 300.0	N/A	Normal	2004-03-04
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Se, Total	S 6010B	S 3010A	Normal	2004-03-04
	Semivolatiles	S 8270C	S 3510C	Normal	2004-03-04
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Si, Total	S 6010B	S 3010A	Normal	2004-03-04
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Sn, Total	S 6010B	S 3010A	Normal	2004-03-04
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Sr, Total	S 6010B	S 3010A	Normal	2004-03-04
	TDS	SM 2540C	N/A	Normal	2004-03-04
	TKN	E 351.3	N/A	Normal	2004-03-04
	TOC	E 415.1	N/A	Normal	2004-03-04
	TPH DRO	Mod. 8015B	N/A	Normal	2004-03-04
	TPH GRO	S 8015B	S 5030B	Normal	2004-03-04
	V, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	V, Total	S 6010B	S 3010A	Normal	2004-03-04
	Volatiles	S 8260B	S 5030B	Normal	2004-03-04
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Zn, Total	S 6010B	S 3010A	Normal	2004-03-04
	pH	SM 4500-H+	N/A	Normal	2004-03-04
28648	Volatiles	S 8260B	S 5030B	Normal	2004-03-04 13:53:58.236989-06

Work Order Receipt

Order

Work Order	4030423
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 GG
	Project Name = HLSTF Diesel Spill
	Project Number = 20 GG
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28649	HLSF-0154-DRW-018-0304	Normal	water	2004-03-03	11:20	20
28650	HLSF-0154-TB-219	Normal	water	2004-03-03	11:20	2

Sample	Test	Method	Prep	Priority	Due Date
28649	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ag, Total	S 6010B	S 3010A	Normal	2004-03-04
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Al, Total	S 6010B	S 3010A	Normal	2004-03-04
	Alkalinity	SM 2320B	N/A	Normal	2004-03-04
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-03-04
	As, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	As, Total	S 6010B	S 3010A	Normal	2004-03-04
	B, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	B, Total	S 6010B	S 3010A	Normal	2004-03-04
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ba, Total	S 6010B	S 3010A	Normal	2004-03-04
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Be, Total	S 6010B	S 3010A	Normal	2004-03-04
	Bromide (IC)	E 300.0	N/A	Normal	2004-03-04
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cd, Total	S 6010B	S 3010A	Normal	2004-03-04
	Chloride (IC)	E 300.0	N/A	Normal	2004-03-04
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-03-04
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Co, Total	S 6010B	S 3010A	Normal	2004-03-04
	Conductivity	SM 2510B	N/A	Normal	2004-03-04
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cr, Total	S 6010B	S 3010A	Normal	2004-03-04
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Cu, Total	S 6010B	S 3010A	Normal	2004-03-04
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-03-04
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Fe, Total	S 6010B	S 3010A	Normal	2004-03-04
	Fluoride (IC)	E 300.0	N/A	Normal	2004-03-04
	Hg, Total	S 7470A	N/A	Normal	2004-03-04
	K, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mn, Total	S 6010B	S 3010A	Normal	2004-03-04
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Mo, Total	S 6010B	S 3010A	Normal	2004-03-04

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-03-04
	NO3 (IC)	E 300.0	N/A	Normal	2004-03-04
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Ni, Total	S 6010B	S 3010A	Normal	2004-03-04
	P, Total	S 6010B	S 3010A	Normal	2004-03-04
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Pb, Total	S 6010B	S 3010A	Normal	2004-03-04
	SO4 (IC)	E 300.0	N/A	Normal	2004-03-04
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Se, Total	S 6010B	S 3010A	Normal	2004-03-04
	Semivolatiles	S 8270C	S 3510C	Normal	2004-03-04
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Si, Total	S 6010B	S 3010A	Normal	2004-03-04
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Sn, Total	S 6010B	S 3010A	Normal	2004-03-04
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Sr, Total	S 6010B	S 3010A	Normal	2004-03-04
	TDS	SM 2540C	N/A	Normal	2004-03-04
	TKN	E 351.3	N/A	Normal	2004-03-04
	TOC	E 415.1	N/A	Normal	2004-03-04
	TPH DRO	Mod. 8015B	N/A	Normal	2004-03-04
	TPH GRO	S 8015B	S 5030B	Normal	2004-03-04
	V, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	V, Total	S 6010B	S 3010A	Normal	2004-03-04
	Volatiles	S 8260B	S 5030B	Normal	2004-03-04
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-03-04
	Zn, Total	S 6010B	S 3010A	Normal	2004-03-04
	pH	SM 4500-H+	N/A	Normal	2004-03-04
28650	Volatiles	S 8260B	S 5030B	Normal	2004-03-04 14:06:28.513657-06

Work Order Receipt

Order

Work Order	4030501
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 GG
	Project Name = HLSTF Diesel Spill
	Project Number = 20 GG
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28651	HLSF-0154-HCF-007-0304	Normal	water	2004-03-04	13:00	42
28652	HLSF-0154-TB-223	Normal	water	2004-03-04	13:00	2

Sample	Test	Method	Prep	Priority	Due Date
28651	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.088122-06
	Ag, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.101928-06
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.105039-06
	Al, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.108027-06
	Alkalinity	SM 2320B	N/A	Normal	2004-03-05 08:59:16.111067-06
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-03-05 08:59:16.201668-06
	As, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.156749-06
	As, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.1598-06
	B, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.162544-06
	B, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.165619-06
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.168658-06
	Ba, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.171397-06
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.174447-06
	Be, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.180516-06
	Bromide (IC)	E 300.0	N/A	Normal	2004-03-05 08:59:16.204839-06
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.207946-06
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.211229-06
	Cd, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.238272-06
	Chloride (IC)	E 300.0	N/A	Normal	2004-03-05 08:59:16.244317-06
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-03-05 08:59:16.147579-06
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.253151-06
	Co, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.261943-06
	Conductivity	SM 2510B	N/A	Normal	2004-03-05 08:59:16.267923-06
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.117324-06
	Cr, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.12033-06
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.123082-06
	Cu, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.129335-06
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-03-05 08:59:16.132123-06
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.13827-06
	Fe, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.141262-06
	Fluoride (IC)	E 300.0	N/A	Normal	2004-03-05 08:59:16.183529-06
	Hg, Total	S 7470A	N/A	Normal	2004-03-05 08:59:16.19276-06
	K, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.214231-06
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.223154-06
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.226214-06
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.264932-06
	Mn, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.270923-06
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.273664-06
	Mo, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.279769-06

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-03-05 08:59:16.300257-06
	NO3 (IC)	E 300.0	N/A	Normal	2004-03-05 08:59:16.144252-06
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.28864-06
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.294396-06
	Ni, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.297499-06
	P, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.150724-06
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.153724-06
	Pb, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.195789-06
	SO4 (IC)	E 300.0	N/A	Normal	2004-03-05 08:59:16.256194-06
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.229284-06
	Se, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.23229-06
	Semivolatiles	S 8270C	S 3510C	Normal	2004-03-05 08:59:16.23528-06
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.189772-06
	Si, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.241315-06
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.247405-06
	Sn, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.250392-06
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.291664-06
	Sr, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.2856-06
	TDS	SM 2540C	N/A	Normal	2004-03-05 08:59:16.114207-06
	TKN	E 351.3	N/A	Normal	2004-03-05 08:59:16.126156-06
	TOC	E 415.1	N/A	Normal	2004-03-05 08:59:16.135191-06
	TPH DRO	Mod. 8015B	N/A	Normal	2004-03-05 08:59:16.177444-06
	TPH GRO	S 8015B	S 5030B	Normal	2004-03-05 08:59:16.186655-06
	V, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.217272-06
	V, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.220358-06
	Volatiles	S 8260B	S 5030B	Normal	2004-03-05 08:59:16.258977-06
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 08:59:16.276732-06
	Zn, Total	S 6010B	S 3010A	Normal	2004-03-05 08:59:16.282802-06
	pH	SM 4500-H+	N/A	Normal	2004-03-05 08:59:16.198555-06
28652	Volatiles	S 8260B	S 5030B	Normal	2004-03-05 08:59:38.132924-06

Work Order Receipt

Order

Work Order	4030502
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 GG
	Project Name = HLSTF Diesel Spill
	Project Number = 20 GG
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28653	HLSF-D154-DRW-001-0304	Normal	water	2004-03-04	13:20	20
28654	HLSF-0154-TB-211	Normal	water	2004-03-04	13:20	2

Sample	Test	Method	Prep	Priority	Due Date
28653	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.398589-06
	Ag, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.411216-06
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.414187-06
	Al, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.417073-06
	Alkalinity	SM 2320B	N/A	Normal	2004-03-05 09:10:59.419918-06
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-03-05 09:10:59.504865-06
	As, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.462513-06
	As, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.465276-06
	B, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.468081-06
	B, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.470882-06
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.473696-06
	Ba, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.476463-06
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.479268-06
	Be, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.487787-06
	Bromide (IC)	E 300.0	N/A	Normal	2004-03-05 09:10:59.50782-06
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.510741-06
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.513596-06
	Cd, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.539953-06
	Chloride (IC)	E 300.0	N/A	Normal	2004-03-05 09:10:59.548382-06
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-03-05 09:10:59.453836-06
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.554044-06
	Co, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.559679-06
	Conductivity	SM 2510B	N/A	Normal	2004-03-05 09:10:59.565229-06
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.425642-06
	Cr, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.428455-06
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.431231-06
	Cu, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.436897-06
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-03-05 09:10:59.439691-06
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.445333-06
	Fe, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.448137-06
	Fluoride (IC)	E 300.0	N/A	Normal	2004-03-05 09:10:59.484914-06
	Hg, Total	S 7470A	N/A	Normal	2004-03-05 09:10:59.496345-06
	K, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.516404-06
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.524778-06
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.527846-06
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.568035-06
	Mn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.570805-06
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.576473-06
	Mo, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.582057-06

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-03-05 09:10:59.598829-06
	NO3 (IC)	E 300.0	N/A	Normal	2004-03-05 09:10:59.450916-06
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.590459-06
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.593291-06
	Ni, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.596054-06
	P, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.456917-06
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.459726-06
	Pb, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.49919-06
	SO4 (IC)	E 300.0	N/A	Normal	2004-03-05 09:10:59.556851-06
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.53064-06
	Se, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.534285-06
	Semivolatiles	S 8270C	S 3510C	Normal	2004-03-05 09:10:59.537129-06
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.493541-06
	Si, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.542773-06
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.545592-06
	Sn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.551247-06
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.587701-06
	Sr, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.584877-06
	TDS	SM 2540C	N/A	Normal	2004-03-05 09:10:59.422742-06
	TKN	E 351.3	N/A	Normal	2004-03-05 09:10:59.434046-06
	TOC	E 415.1	N/A	Normal	2004-03-05 09:10:59.442484-06
	TPH DRO	Mod. 8015B	N/A	Normal	2004-03-05 09:10:59.482044-06
	TPH GRO	S 8015B	S 5030B	Normal	2004-03-05 09:10:59.490623-06
	V, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.519219-06
	V, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.522017-06
	Volatiles	S 8260B	S 5030B	Normal	2004-03-05 09:10:59.562473-06
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:10:59.573589-06
	Zn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:10:59.579271-06
	pH	SM 4500-H+	N/A	Normal	2004-03-05 09:10:59.50197-06
28654	Volatiles	S 8260B	S 5030B	Normal	2004-03-05 09:11:27.961046-06

Work Order Receipt

Order

Work Order	4030503
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 GG
	Project Name = HLSTF Diesel Spill
	Project Number = 20 GG
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28655	HLSF-0154-HCF-005-0304	Normal	water	2004-03-04	13:10	21
28656	HLSF-0154-TB-221	Normal	water	2004-03-04	13:10	2

Sample	Test	Method	Prep	Priority	Due Date
28655	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:32.906958-06
	Ag, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:32.920534-06
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:32.92365-06
	Al, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:32.926682-06
	Alkalinity	SM 2320B	N/A	Normal	2004-03-05 09:17:32.929612-06
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-03-05 09:17:33.02061-06
	As, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:32.975481-06
	As, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:32.978629-06
	B, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:32.981439-06
	B, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:32.984424-06
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:32.987445-06
	Ba, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:32.990181-06
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:32.993308-06
	Be, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.002505-06
	Bromide (IC)	E 300.0	N/A	Normal	2004-03-05 09:17:33.02377-06
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.026904-06
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.030224-06
	Cd, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.05723-06
	Chloride (IC)	E 300.0	N/A	Normal	2004-03-05 09:17:33.066269-06
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-03-05 09:17:32.965748-06
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.0721-06
	Co, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.077971-06
	Conductivity	SM 2510B	N/A	Normal	2004-03-05 09:17:33.08399-06
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:32.935718-06
	Cr, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:32.938753-06
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:32.941509-06
	Cu, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:32.947623-06
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-03-05 09:17:32.950397-06
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:32.956726-06
	Fe, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:32.959895-06
	Fluoride (IC)	E 300.0	N/A	Normal	2004-03-05 09:17:32.999446-06
	Hg, Total	S 7470A	N/A	Normal	2004-03-05 09:17:33.01171-06
	K, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.033244-06
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.042149-06
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.045225-06
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.08704-06
	Mn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.09007-06
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.095716-06
	Mo, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.101475-06

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-03-05 09:17:33.119122-06
	NO3 (IC)	E 300.0	N/A	Normal	2004-03-05 09:17:32.962718-06
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.110281-06
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.113347-06
	Ni, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.116367-06
	P, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:32.968912-06
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:32.971925-06
	Pb, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.014749-06
	SO4 (IC)	E 300.0	N/A	Normal	2004-03-05 09:17:33.075136-06
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.048249-06
	Se, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.05124-06
	Semivolatiles	S 8270C	S 3510C	Normal	2004-03-05 09:17:33.054231-06
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.008658-06
	Si, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.060218-06
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.063246-06
	Sn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.069341-06
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.107532-06
	Sr, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.104526-06
	TDS	SM 2540C	N/A	Normal	2004-03-05 09:17:32.932419-06
	TKN	E 351.3	N/A	Normal	2004-03-05 09:17:32.944544-06
	TOC	E 415.1	N/A	Normal	2004-03-05 09:17:32.953495-06
	TPH DRO	Mod. 8015B	N/A	Normal	2004-03-05 09:17:32.996369-06
	TPH GRO	S 8015B	S 5030B	Normal	2004-03-05 09:17:33.005517-06
	V, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.036263-06
	V, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.039349-06
	Volatiles	S 8260B	S 5030B	Normal	2004-03-05 09:17:33.081007-06
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:17:33.092826-06
	Zn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:17:33.098722-06
	pH	SM 4500-H+	N/A	Normal	2004-03-05 09:17:33.01751-06
28656	Volatiles	S 8260B	S 5030B	Normal	2004-03-05 09:17:51.154847-06

Work Order Receipt

Order

Work Order	4030504
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 GG
	Project Name = HLSTF Diesel Spill
	Project Number = 20 GG
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28657	HLSF-0154-HCF-105-0304	Normal	water	2004-03-04	13:10	20
28658	HLSF-0154-TB-222	Normal	water	2004-03-04	13:10	2

Sample	Test	Method	Prep	Priority	Due Date
28657	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.220729-06
	Ag, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.234338-06
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.23727-06
	Al, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.240158-06
	Alkalinity	SM 2320B	N/A	Normal	2004-03-05 09:20:46.243002-06
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-03-05 09:20:46.331991-06
	As, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.288025-06
	As, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.29078-06
	B, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.293569-06
	B, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.296864-06
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.299665-06
	Ba, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.302506-06
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.305323-06
	Be, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.31404-06
	Bromide (IC)	E 300.0	N/A	Normal	2004-03-05 09:20:46.33513-06
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.338235-06
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.341557-06
	Cd, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.367787-06
	Chloride (IC)	E 300.0	N/A	Normal	2004-03-05 09:20:46.376239-06
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-03-05 09:20:46.278985-06
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.381846-06
	Co, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.387751-06
	Conductivity	SM 2510B	N/A	Normal	2004-03-05 09:20:46.393365-06
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.249638-06
	Cr, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.25246-06
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.255203-06
	Cu, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.261635-06
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-03-05 09:20:46.264476-06
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.2704-06
	Fe, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.273203-06
	Fluoride (IC)	E 300.0	N/A	Normal	2004-03-05 09:20:46.311194-06
	Hg, Total	S 7470A	N/A	Normal	2004-03-05 09:20:46.322984-06
	K, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.344567-06
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.353177-06
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.356193-06
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.396193-06
	Mn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.39949-06
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.405719-06
	Mo, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.411514-06

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-03-05 09:20:46.429069-06
	NO3 (IC)	E 300.0	N/A	Normal	2004-03-05 09:20:46.276038-06
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.419879-06
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.422969-06
	Ni, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.426293-06
	P, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.282148-06
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.284995-06
	Pb, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.326066-06
	SO4 (IC)	E 300.0	N/A	Normal	2004-03-05 09:20:46.384928-06
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.359196-06
	Se, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.36219-06
	Semivolatiles	S 8270C	S 3510C	Normal	2004-03-05 09:20:46.365-06
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.319952-06
	Si, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.370619-06
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.373506-06
	Sn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.379071-06
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.417121-06
	Sr, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.414292-06
	TDS	SM 2540C	N/A	Normal	2004-03-05 09:20:46.245849-06
	TKN	E 351.3	N/A	Normal	2004-03-05 09:20:46.258531-06
	TOC	E 415.1	N/A	Normal	2004-03-05 09:20:46.267328-06
	TPH DRO	Mod. 8015B	N/A	Normal	2004-03-05 09:20:46.308092-06
	TPH GRO	S 8015B	S 5030B	Normal	2004-03-05 09:20:46.316866-06
	V, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.34759-06
	V, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.350388-06
	Volatiles	S 8260B	S 5030B	Normal	2004-03-05 09:20:46.390573-06
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:20:46.402274-06
	Zn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:20:46.408537-06
	pH	SM 4500-H+	N/A	Normal	2004-03-05 09:20:46.328879-06
28658	Volatiles	S 8260B	S 5030B	Normal	2004-03-05 09:21:04.187911-06

Work Order Receipt

Order

Work Order	4030505
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 GG
	Project Name = HLSTF Diesel Spill
	Project Number = 20 GG
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28659	HLSF-0154-DRW-013-0304	Normal	water	2004-03-04	10:30	20
28660	HLSF-0154-TB-218	Normal	water	2004-03-04	10:30	2

Sample	Test	Method	Prep	Priority	Due Date
28659	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.197036-06
	Ag, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.210985-06
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.214227-06
	Al, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.217333-06
	Alkalinity	SM 2320B	N/A	Normal	2004-03-05 09:24:14.220344-06
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-03-05 09:24:14.312109-06
	As, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.266595-06
	As, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.269573-06
	B, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.272599-06
	B, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.275582-06
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.278575-06
	Ba, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.281605-06
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.284705-06
	Be, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.290586-06
	Bromide (IC)	E 300.0	N/A	Normal	2004-03-05 09:24:14.315279-06
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.318371-06
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.321674-06
	Cd, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.34846-06
	Chloride (IC)	E 300.0	N/A	Normal	2004-03-05 09:24:14.354606-06
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-03-05 09:24:14.257448-06
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.363022-06
	Co, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.371933-06
	Conductivity	SM 2510B	N/A	Normal	2004-03-05 09:24:14.377965-06
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.226666-06
	Cr, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.229662-06
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.232717-06
	Cu, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.238774-06
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-03-05 09:24:14.241834-06
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.24793-06
	Fe, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.250948-06
	Fluoride (IC)	E 300.0	N/A	Normal	2004-03-05 09:24:14.29379-06
	Hg, Total	S 7470A	N/A	Normal	2004-03-05 09:24:14.303022-06
	K, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.324745-06
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.333533-06
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.336616-06
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.374944-06
	Mn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.381042-06
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.384097-06
	Mo, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.390085-06

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-03-05 09:24:14.411803-06
	NO3 (IC)	E 300.0	N/A	Normal	2004-03-05 09:24:14.254026-06
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.399078-06
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.405713-06
	Ni, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.40876-06
	P, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.26059-06
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.263621-06
	Pb, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.306058-06
	SO4 (IC)	E 300.0	N/A	Normal	2004-03-05 09:24:14.366035-06
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.339661-06
	Se, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.342699-06
	Semivolatiles	S 8270C	S 3510C	Normal	2004-03-05 09:24:14.345716-06
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.299987-06
	Si, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.351549-06
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.357475-06
	Sn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.360251-06
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.402922-06
	Sr, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.396093-06
	TDS	SM 2540C	N/A	Normal	2004-03-05 09:24:14.223577-06
	TKN	E 351.3	N/A	Normal	2004-03-05 09:24:14.235706-06
	TOC	E 415.1	N/A	Normal	2004-03-05 09:24:14.244868-06
	TPH DRO	Mod. 8015B	N/A	Normal	2004-03-05 09:24:14.28748-06
	TPH GRO	S 8015B	S 5030B	Normal	2004-03-05 09:24:14.296865-06
	V, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.327767-06
	V, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.330769-06
	Volatiles	S 8260B	S 5030B	Normal	2004-03-05 09:24:14.368838-06
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-03-05 09:24:14.387106-06
	Zn, Total	S 6010B	S 3010A	Normal	2004-03-05 09:24:14.393083-06
	pH	SM 4500-H+	N/A	Normal	2004-03-05 09:24:14.309071-06
28660	Volatiles	S 8260B	S 5030B	Normal	2004-03-05 09:24:32.932519-06

Work Order Receipt

Order

Work Order	4030912
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 GG
	Project Name = HLSTF Diesel Spill
	Project Number = 20 GG
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28871	HLSF-0154-DRW-005-0304	Normal	water	2004-03-05	10:45	20
28872	HLSF-0154-TB-218	Normal	water	2004-03-05	10:45	2

Sample	Test	Method	Prep	Priority	Due Date
28871	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.127927-06
	Ag, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.141767-06
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.144895-06
	Al, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.148014-06
	Alkalinity	SM 2320B	N/A	Normal	2004-03-09 12:06:53.150804-06
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-03-09 12:06:53.242253-06
	As, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.197066-06
	As, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.20005-06
	B, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.20307-06
	B, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.206078-06
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.209133-06
	Ba, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.212127-06
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.215185-06
	Be, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.224448-06
	Bromide (IC)	E 300.0	N/A	Normal	2004-03-09 12:06:53.245408-06
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.248468-06
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.251738-06
	Cd, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.279057-06
	Chloride (IC)	E 300.0	N/A	Normal	2004-03-09 12:06:53.288187-06
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-03-09 12:06:53.187909-06
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.294305-06
	Co, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.300432-06
	Conductivity	SM 2510B	N/A	Normal	2004-03-09 12:06:53.306167-06
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.157223-06
	Cr, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.160252-06
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.16331-06
	Cu, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.169385-06
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-03-09 12:06:53.172428-06
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.178499-06
	Fe, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.181502-06
	Fluoride (IC)	E 300.0	N/A	Normal	2004-03-09 12:06:53.22139-06
	Hg, Total	S 7470A	N/A	Normal	2004-03-09 12:06:53.233358-06
	K, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.25479-06
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.264099-06
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.267141-06
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.309232-06
	Mn, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.312241-06
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.318378-06
	Mo, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.324459-06

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-03-09 12:06:53.342098-06
	NO3 (IC)	E 300.0	N/A	Normal	2004-03-09 12:06:53.184521-06
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.333053-06
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.336094-06
	Ni, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.339085-06
	P, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.191048-06
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.194069-06
	Pb, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.236407-06
	SO4 (IC)	E 300.0	N/A	Normal	2004-03-09 12:06:53.297363-06
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.269892-06
	Se, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.272948-06
	Semivolatiles	S 8270C	S 3510C	Normal	2004-03-09 12:06:53.276023-06
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.230361-06
	Si, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.28212-06
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.285158-06
	Sn, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.291245-06
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.330278-06
	Sr, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.32725-06
	TDS	SM 2540C	N/A	Normal	2004-03-09 12:06:53.154111-06
	TKN	E 351.3	N/A	Normal	2004-03-09 12:06:53.166324-06
	TOC	E 415.1	N/A	Normal	2004-03-09 12:06:53.175436-06
	TPH DRO	Mod. 8015B	N/A	Normal	2004-03-09 12:06:53.218295-06
	TPH GRO	S 8015B	S 5030B	Normal	2004-03-09 12:06:53.227207-06
	V, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.257852-06
	V, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.260856-06
	Volatiles	S 8260B	S 5030B	Normal	2004-03-09 12:06:53.303449-06
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:06:53.315304-06
	Zn, Total	S 6010B	S 3010A	Normal	2004-03-09 12:06:53.321423-06
	pH	SM 4500-H+	N/A	Normal	2004-03-09 12:06:53.239159-06
28872	Volatiles	S 8260B	S 5030B	Normal	2004-03-09 12:07:13.96399-06

Work Order Receipt

Order

Work Order	4030913
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 GG
	Project Name = HLSTF Diesel Spill
	Project Number = 20 GG
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28873	HLSF-0154-DRW-002-0304	Normal	water	2004-03-05	12:00	20
28874	HLSF-0154-TB-212	Normal	water	2004-03-05	12:00	2

Sample	Test	Method	Prep	Priority	Due Date
28873	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:48.920283-06
	Ag, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:48.934154-06
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:48.937274-06
	Al, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:48.940282-06
	Alkalinity	SM 2320B	N/A	Normal	2004-03-09 12:11:48.943066-06
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-03-09 12:11:49.035993-06
	As, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:48.989658-06
	As, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:48.992687-06
	B, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:48.995815-06
	B, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:48.998871-06
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.001905-06
	Ba, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.00555-06
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.008647-06
	Be, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.017878-06
	Bromide (IC)	E 300.0	N/A	Normal	2004-03-09 12:11:49.039202-06
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.042303-06
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.045613-06
	Cd, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.07276-06
	Chloride (IC)	E 300.0	N/A	Normal	2004-03-09 12:11:49.081949-06
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-03-09 12:11:48.980486-06
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.087807-06
	Co, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.093961-06
	Conductivity	SM 2510B	N/A	Normal	2004-03-09 12:11:49.099756-06
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:48.949559-06
	Cr, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:48.9526-06
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:48.955658-06
	Cu, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:48.961816-06
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-03-09 12:11:48.964933-06
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:48.971015-06
	Fe, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:48.974029-06
	Fluoride (IC)	E 300.0	N/A	Normal	2004-03-09 12:11:49.014806-06
	Hg, Total	S 7470A	N/A	Normal	2004-03-09 12:11:49.02685-06
	K, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.048674-06
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.057881-06
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.060915-06
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.102813-06
	Mn, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.105854-06
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.112-06
	Mo, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.118052-06

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-03-09 12:11:49.135737-06
	NO3 (IC)	E 300.0	N/A	Normal	2004-03-09 12:11:48.977136-06
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.126643-06
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.1297-06
	Ni, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.132683-06
	P, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:48.983631-06
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:48.986662-06
	Pb, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.029881-06
	SO4 (IC)	E 300.0	N/A	Normal	2004-03-09 12:11:49.090855-06
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.063684-06
	Se, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.066749-06
	Semivolatiles	S 8270C	S 3510C	Normal	2004-03-09 12:11:49.069761-06
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.023811-06
	Si, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.075831-06
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.078914-06
	Sn, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.085017-06
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.123895-06
	Sr, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.120865-06
	TDS	SM 2540C	N/A	Normal	2004-03-09 12:11:48.946454-06
	TKN	E 351.3	N/A	Normal	2004-03-09 12:11:48.958709-06
	TOC	E 415.1	N/A	Normal	2004-03-09 12:11:48.967954-06
	TPH DRO	Mod. 8015B	N/A	Normal	2004-03-09 12:11:49.011724-06
	TPH GRO	S 8015B	S 5030B	Normal	2004-03-09 12:11:49.020633-06
	V, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.05175-06
	V, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.054791-06
	Volatiles	S 8260B	S 5030B	Normal	2004-03-09 12:11:49.09702-06
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:11:49.108972-06
	Zn, Total	S 6010B	S 3010A	Normal	2004-03-09 12:11:49.114999-06
	pH	SM 4500-H+	N/A	Normal	2004-03-09 12:11:49.032852-06
28874	Volatiles	S 8260B	S 5030B	Normal	2004-03-09 12:13:07.169858-06

Work Order Receipt

Order

Work Order	4030914
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20 GG
	Project Name = HLSTF Diesel Spill
	Project Number = 20 GG
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28875	HLSF-0154-DRW-004-0304	Normal	water	2004-03-05	11:00	20
28876	HLSF-0154-TB-215	Normal	water	2004-03-05	11:00	2

Sample	Test	Method	Prep	Priority	Due Date
28875	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.082683-06
	Ag, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.097145-06
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.100603-06
	Al, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.104088-06
	Alkalinity	SM 2320B	N/A	Normal	2004-03-09 12:17:08.107333-06
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-03-09 12:17:08.211169-06
	As, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.159084-06
	As, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.162412-06
	B, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.165774-06
	B, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.169124-06
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.172489-06
	Ba, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.175668-06
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.179235-06
	Be, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.189512-06
	Bromide (IC)	E 300.0	N/A	Normal	2004-03-09 12:17:08.214708-06
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.218154-06
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.221823-06
	Cd, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.25218-06
	Chloride (IC)	E 300.0	N/A	Normal	2004-03-09 12:17:08.262439-06
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-03-09 12:17:08.148832-06
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.268998-06
	Co, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.27581-06
	Conductivity	SM 2510B	N/A	Normal	2004-03-09 12:17:08.282243-06
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.114339-06
	Cr, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.117774-06
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.12125-06
	Cu, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.128116-06
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-03-09 12:17:08.131555-06
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.138415-06
	Fe, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.141816-06
	Fluoride (IC)	E 300.0	N/A	Normal	2004-03-09 12:17:08.186066-06
	Hg, Total	S 7470A	N/A	Normal	2004-03-09 12:17:08.200686-06
	K, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.225198-06
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.235585-06
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.239038-06
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.285628-06
	Mn, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.289017-06
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.295802-06
	Mo, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.30264-06

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	NO2 (IC)	E 300.0	N/A	Normal	2004-03-09 12:17:08.328707-06
	NO3 (IC)	E 300.0	N/A	Normal	2004-03-09 12:17:08.145161-06
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.317666-06
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.321955-06
	Ni, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.325403-06
	P, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.152338-06
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.155723-06
	Pb, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.204182-06
	SO4 (IC)	E 300.0	N/A	Normal	2004-03-09 12:17:08.272373-06
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.242128-06
	Se, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.245508-06
	Semivolatiles	S 8270C	S 3510C	Normal	2004-03-09 12:17:08.248855-06
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.197249-06
	Si, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.255641-06
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.259044-06
	Sn, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.265886-06
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.314656-06
	Sr, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.31118-06
	TDS	SM 2540C	N/A	Normal	2004-03-09 12:17:08.110843-06
	TKN	E 351.3	N/A	Normal	2004-03-09 12:17:08.124639-06
	TOC	E 415.1	N/A	Normal	2004-03-09 12:17:08.134959-06
	TPH DRO	Mod. 8015B	N/A	Normal	2004-03-09 12:17:08.182599-06
	TPH GRO	S 8015B	S 5030B	Normal	2004-03-09 12:17:08.193708-06
	V, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.228607-06
	V, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.23218-06
	Volatiles	S 8260B	S 5030B	Normal	2004-03-09 12:17:08.279203-06
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-03-09 12:17:08.292411-06
	Zn, Total	S 6010B	S 3010A	Normal	2004-03-09 12:17:08.299237-06
	pH	SM 4500-H+	N/A	Normal	2004-03-09 12:17:08.20755-06
28876	Volatiles	S 8260B	S 5030B	Normal	2004-03-09 12:17:24.729649-06

Work Order Receipt

Order

Work Order	4030916
Receive Date	at
Requestor	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Invoicing	Benitos Avalos - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	500 EE
	Project Name = Stormwater Cement Batch Plant
	Project Number = 500 EE
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
28878	MNPA-STWT-CMBP-0304	Normal	water	2004-03-05	12:59	1

Sample	Test	Method	Prep	Priority	Due Date
28878	TSS	SM 2540D	N/A	Normal	2004-03-09
	pH	SM 4500-H+	N/A	Normal	2004-03-09

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8274	Date Analyzed:	2004-03-15	Analyzed By:	JG
Prep Batch:	7377	Date Prepared:	2004-03-15	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Carbonate Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Bicarbonate Alkalinity		2470	mg/L as CaCo3	2	4.00
Total Alkalinity		2470	mg/L as CaCo3	2	4.00

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8274	Date Analyzed:	2004-03-15	Analyzed By:	JG
Prep Batch:	7377	Date Prepared:	2004-03-15	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Carbonate Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Bicarbonate Alkalinity		2620	mg/L as CaCo3	2	4.00
Total Alkalinity		2620	mg/L as CaCo3	2	4.00

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8274	Date Analyzed:	2004-03-15	Analyzed By:	JG
Prep Batch:	7377	Date Prepared:	2004-03-15	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		176	mg/L as CaCo3	1	4.00
Total Alkalinity		176	mg/L as CaCo3	1	4.00

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8274	Date Analyzed:	2004-03-15	Analyzed By:	JG
Prep Batch:	7377	Date Prepared:	2004-03-15	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Carbonate Alkalinity		<2.00	mg/L as CaCo3	2	1.00

continued . . .

sample 28651 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bicarbonate Alkalinity		1530	mg/L as CaCo3	2	4.00
Total Alkalinity		1530	mg/L as CaCo3	2	4.00

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8274	Date Analyzed:	2004-03-15	Analyzed By:	JG
Prep Batch:	7377	Date Prepared:	2004-03-15	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Carbonate Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Bicarbonate Alkalinity		1980	mg/L as CaCo3	2	4.00
Total Alkalinity		1980	mg/L as CaCo3	2	4.00

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8274	Date Analyzed:	2004-03-15	Analyzed By:	JG
Prep Batch:	7377	Date Prepared:	2004-03-15	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Carbonate Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Bicarbonate Alkalinity		2430	mg/L as CaCo3	2	4.00
Total Alkalinity		2430	mg/L as CaCo3	2	4.00

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8274	Date Analyzed:	2004-03-15	Analyzed By:	JG
Prep Batch:	7377	Date Prepared:	2004-03-15	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Carbonate Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Bicarbonate Alkalinity		2320	mg/L as CaCo3	2	4.00
Total Alkalinity		2320	mg/L as CaCo3	2	4.00

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A

QC Batch:	8274	Date Analyzed:	2004-03-15	Analyzed By:	JG
Prep Batch:	7377	Date Prepared:	2004-03-15	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Carbonate Alkalinity		<2.00	mg/L as CaCo3	2	1.00
Bicarbonate Alkalinity		168	mg/L as CaCo3	2	4.00
Total Alkalinity		168	mg/L as CaCo3	2	4.00

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8333	Date Analyzed:	2004-03-18	Analyzed By:	JG
Prep Batch:	7426	Date Prepared:	2004-03-18	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		644	mg/L as CaCo3	1	4.00
Total Alkalinity		644	mg/L as CaCo3	1	4.00

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8333	Date Analyzed:	2004-03-18	Analyzed By:	JG
Prep Batch:	7426	Date Prepared:	2004-03-18	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		1500	mg/L as CaCo3	1	4.00
Total Alkalinity		1500	mg/L as CaCo3	1	4.00

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8333	Date Analyzed:	2004-03-18	Analyzed By:	JG
Prep Batch:	7426	Date Prepared:	2004-03-18	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		2690	mg/L as CaCo3	1	4.00
Total Alkalinity		2690	mg/L as CaCo3	1	4.00

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8333	Date Analyzed:	2004-03-18	Analyzed By:	JG
Prep Batch:	7426	Date Prepared:	2004-03-18	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		344	mg/L as CaCo3	1	4.00
Total Alkalinity		344	mg/L as CaCo3	1	4.00

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	8333	Date Analyzed:	2004-03-18	Analyzed By:	JG
Prep Batch:	7426	Date Prepared:	2004-03-18	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		208	mg/L as CaCo3	1	4.00
Total Alkalinity		208	mg/L as CaCo3	1	4.00

Method Blank (1) QC Batch: 8274

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		4.00	mg/L as CaCo3	4
Total Alkalinity		4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 8333

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Duplicate (1) QC Batch: 8274

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<2.00	mg/L as CaCo3	1	0	11
Carbonate Alkalinity	<1.00	<2.00	mg/L as CaCo3	1	0	11
Bicarbonate Alkalinity	1540	1530	mg/L as CaCo3	1	1	11
Total Alkalinity	1540	1530	mg/L as CaCo3	1	1	11

Duplicate (1) QC Batch: 8333

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Bicarbonate Alkalinity	1150	1140	mg/L as CaCo3	1	1	11
Total Alkalinity	1150	1140	mg/L as CaCo3	1	1	11

Standard (ICV-1) QC Batch: 8274

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 105	2004-03-15

Standard (CCV-1) QC Batch: 8274

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 105	2004-03-15

Standard (ICV-1) QC Batch: 8333

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 105	2004-03-18

Standard (CCV-1) QC Batch: 8333

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	242	97	90 - 105	2004-03-18

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	8070	Date Analyzed:	2004-03-08	Analyzed By:	MW
Prep Batch:	7205	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	8070	Date Analyzed:	2004-03-08	Analyzed By:	MW
Prep Batch:	7205	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	8070	Date Analyzed:	2004-03-08	Analyzed By:	MW
Prep Batch:	7205	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	8070	Date Analyzed:	2004-03-08	Analyzed By:	MW
Prep Batch:	7205	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	8070	Date Analyzed:	2004-03-08	Analyzed By:	MW
Prep Batch:	7205	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		1.01	mg/L	1	1.00

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	8070	Date Analyzed:	2004-03-08	Analyzed By:	MW
Prep Batch:	7205	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	8108	Date Analyzed:	2004-03-10	Analyzed By:	MW
Prep Batch:	7238	Date Prepared:	2004-03-10	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	8108	Date Analyzed:	2004-03-10	Analyzed By:	MW
Prep Batch:	7238	Date Prepared:	2004-03-10	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	8108	Date Analyzed:	2004-03-10	Analyzed By:	MW
Prep Batch:	7238	Date Prepared:	2004-03-10	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	8108	Date Analyzed:	2004-03-10	Analyzed By:	MW

Prep Batch: 7238 Date Prepared: 2004-03-10 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis: Ammonia Analytical Method: SM 4500-NH3 B,C Prep Method: N/A
QC Batch: 8108 Date Analyzed: 2004-03-10 Analyzed By: MW
Prep Batch: 7238 Date Prepared: 2004-03-10 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis: Ammonia Analytical Method: SM 4500-NH3 B,C Prep Method: N/A
QC Batch: 8125 Date Analyzed: 2004-03-10 Analyzed By: MW
Prep Batch: 7256 Date Prepared: 2004-03-10 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis: Ammonia Analytical Method: SM 4500-NH3 B,C Prep Method: N/A
QC Batch: 8125 Date Analyzed: 2004-03-10 Analyzed By: MW
Prep Batch: 7256 Date Prepared: 2004-03-10 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Method Blank (1) QC Batch: 8070

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Method Blank (1) QC Batch: 8108

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Method Blank (1) QC Batch: 8125

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 8070

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.65	4.54	mg/L	1	5.00	<0.318	93	2	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8108

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.48	4.48	mg/L	1	5.00	<0.318	90	0	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8125

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.70	4.48	mg/L	1	5.00	<0.318	94	5	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8070

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	5.60	5.10	mg/L	1	5.00	<0.318	112	9	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8108

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.54	4.54	mg/L	1	5.00	<0.318	91	0	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8125

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N [1,2]	<0.318	<0.318	mg/L	1	5.00	<0.318	0	0	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 8070

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.93	99	85 - 115	2004-03-08

Standard (CCV-1) QC Batch: 8070

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	5.21	104	85 - 115	2004-03-08

Standard (ICV-1) QC Batch: 8108

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.59	92	85 - 115	2004-03-10

Standard (CCV-1) QC Batch: 8108

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.93	99	85 - 115	2004-03-10

Standard (ICV-1) QC Batch: 8125

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.93	99	85 - 115	2004-03-10

Standard (CCV-1) QC Batch: 8125

[1]Matrix spike difficulties - sample interference.
[2]Matrix spike difficulties - sample interference.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.76	95	85 - 115	2004-03-10

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	8147	Date Analyzed:	2004-03-04	Analyzed By:	MK
Prep Batch:	7272	Date Prepared:	2004-03-04	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		11400	μMHOS/cm	1	0.00

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	8147	Date Analyzed:	2004-03-04	Analyzed By:	MK
Prep Batch:	7272	Date Prepared:	2004-03-04	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		10900	μMHOS/cm	1	0.00

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	8147	Date Analyzed:	2004-03-04	Analyzed By:	MK
Prep Batch:	7272	Date Prepared:	2004-03-04	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		15400	μMHOS/cm	1	0.00

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	8145	Date Analyzed:	2004-03-09	Analyzed By:	MK
Prep Batch:	7270	Date Prepared:	2004-03-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		9730	μMHOS/cm	1	0.00

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	8145	Date Analyzed:	2004-03-09	Analyzed By:	MK
Prep Batch:	7270	Date Prepared:	2004-03-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		9110	μMHOS/cm	1	0.00

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	8145	Date Analyzed:	2004-03-09	Analyzed By:	MK
Prep Batch:	7270	Date Prepared:	2004-03-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		9690	μMHOS/cm	1	0.00

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	8145	Date Analyzed:	2004-03-09	Analyzed By:	MK
Prep Batch:	7270	Date Prepared:	2004-03-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		9540	μMHOS/cm	1	0.00

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	8145	Date Analyzed:	2004-03-09	Analyzed By:	MK
Prep Batch:	7270	Date Prepared:	2004-03-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		10600	μMHOS/cm	1	0.00

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	8145	Date Analyzed:	2004-03-09	Analyzed By:	MK
Prep Batch:	7270	Date Prepared:	2004-03-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		7900	μMHOS/cm	1	0.00

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	8145	Date Analyzed:	2004-03-09	Analyzed By:	MK

Prep Batch: 7270 Date Prepared: 2004-03-09 Prepared By: MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		11700	μMHOS/cm	1	0.00

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis: Conductivity Analytical Method: SM 2510B Prep Method: N/A
QC Batch: 8145 Date Analyzed: 2004-03-09 Analyzed By: MK
Prep Batch: 7270 Date Prepared: 2004-03-09 Prepared By: MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		10700	μMHOS/cm	1	0.00

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis: Conductivity Analytical Method: SM 2510B Prep Method: N/A
QC Batch: 8145 Date Analyzed: 2004-03-09 Analyzed By: MK
Prep Batch: 7270 Date Prepared: 2004-03-09 Prepared By: MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		9620	μMHOS/cm	1	0.00

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis: Conductivity Analytical Method: SM 2510B Prep Method: N/A
QC Batch: 8145 Date Analyzed: 2004-03-09 Analyzed By: MK
Prep Batch: 7270 Date Prepared: 2004-03-09 Prepared By: MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		30500	μMHOS/cm	1	0.00

Method Blank (1) QC Batch: 8145

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Method Blank (1) QC Batch: 8147

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Duplicate (1) QC Batch: 8145

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	9770	9730	μMHOS/cm	1	0	8

Duplicate (1) QC Batch: 8147

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	10900	10900	μMHOS/cm	1	0	8

Standard (ICV-1) QC Batch: 8145

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1420	101	90 - 110	2004-03-09

Standard (CCV-1) QC Batch: 8145

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1440	102	90 - 110	2004-03-09

Standard (ICV-1) QC Batch: 8147

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1400	99	90 - 110	2004-03-04

Standard (CCV-1) QC Batch: 8147

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1430	102	90 - 110	2004-03-04

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	8140	Date Analyzed:	2004-03-04	Analyzed By:	JR
Prep Batch:	7265	Date Prepared:	2004-03-04	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0260	mg/L	1	0.0100

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	8140	Date Analyzed:	2004-03-04	Analyzed By:	JR
Prep Batch:	7265	Date Prepared:	2004-03-04	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0370	mg/L	1	0.0100

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	8140	Date Analyzed:	2004-03-04	Analyzed By:	JR
Prep Batch:	7265	Date Prepared:	2004-03-04	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.386	mg/L	1	0.0100

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	8141	Date Analyzed:	2004-03-05	Analyzed By:	JR
Prep Batch:	7266	Date Prepared:	2004-03-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0930	mg/L	1	0.0100

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	8141	Date Analyzed:	2004-03-05	Analyzed By:	JR
Prep Batch:	7266	Date Prepared:	2004-03-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0380	mg/L	1	0.0100

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	8141	Date Analyzed:	2004-03-05	Analyzed By:	JR
Prep Batch:	7266	Date Prepared:	2004-03-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0970	mg/L	1	0.0100

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	8141	Date Analyzed:	2004-03-05	Analyzed By:	JR
Prep Batch:	7266	Date Prepared:	2004-03-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.137	mg/L	1	0.0100

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	8141	Date Analyzed:	2004-03-05	Analyzed By:	JR
Prep Batch:	7266	Date Prepared:	2004-03-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	8142	Date Analyzed:	2004-03-05	Analyzed By:	JR
Prep Batch:	7267	Date Prepared:	2004-03-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	8142	Date Analyzed:	2004-03-05	Analyzed By:	JR

Prep Batch: 7267 Date Prepared: 2004-03-05 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.400	mg/L	40	0.0100

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis: Chromium, Hexavalent Analytical Method: SM 3500-Cr B Prep Method: N/A
QC Batch: 8142 Date Analyzed: 2004-03-05 Analyzed By: JR
Prep Batch: 7267 Date Prepared: 2004-03-05 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis: Chromium, Hexavalent Analytical Method: SM 3500-Cr B Prep Method: N/A
QC Batch: 8143 Date Analyzed: 2004-03-09 Analyzed By: JR
Prep Batch: 7269 Date Prepared: 2004-03-09 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0340	mg/L	1	0.0100

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis: Chromium, Hexavalent Analytical Method: SM 3500-Cr B Prep Method: N/A
QC Batch: 8143 Date Analyzed: 2004-03-09 Analyzed By: JR
Prep Batch: 7269 Date Prepared: 2004-03-09 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.500	mg/L	50	0.0100

Method Blank (1) QC Batch: 8140

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 8141

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 8142

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 8143

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Laboratory Control Spike (LCS-1) QC Batch: 8140

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.494	0.498	mg/L	1	0.500	<0.00500	99	1	88 - 117	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8141

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.513	0.529	mg/L	1	0.500	<0.00500	103	3	88 - 117	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8142

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.498	0.504	mg/L	1	0.500	<0.00500	100	1	88 - 117	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8143

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.503	0.502	mg/L	1	0.500	<0.00500	101	0	88 - 117	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8140

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.603	0.594	mg/L	1.11	0.500	0.037	102	2	52 - 161	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8141

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.769	0.769	mg/L	1.11	0.500	0.093	122	0	52 - 161	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8142

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.579	0.601	mg/L	1.11	0.500	0.007	103	4	52 - 161	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8143

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.598	0.596	mg/L	1.11	0.500	0.034	102	0	52 - 161	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 8140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.533	107	80 - 120	2004-03-04

Standard (CCV-1) QC Batch: 8140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.508	102	80 - 120	2004-03-04

Standard (ICV-1) QC Batch: 8141

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.514	103	80 - 120	2004-03-05

Standard (CCV-1) QC Batch: 8141

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.509	102	80 - 120	2004-03-05

Standard (ICV-1) QC Batch: 8142

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.524	105	80 - 120	2004-03-05

Standard (CCV-1) QC Batch: 8142

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.509	102	80 - 120	2004-03-05

Standard (ICV-1) QC Batch: 8143

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.523	105	80 - 120	2004-03-09

Standard (CCV-1) QC Batch: 8143

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.511	102	80 - 120	2004-03-09

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8252	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		0.170	mg/L	1	0.0100
Dissolved Boron		6.96	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		0.00300	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.286	mg/L	1	0.0500
Dissolved Manganese		0.244	mg/L	1	0.0250
Dissolved Molybdenum		0.657	mg/L	1	0.0500
Dissolved Nickel		0.0490	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		2.63	mg/L	10	0.00500
Dissolved Vanadium		0.142	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		37.9	mg/L	10	0.0500
Dissolved Lithium		0.257	mg/L	1	0.00500

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8252	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		0.137	mg/L	1	0.0100
Dissolved Boron		8.35	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		0.00300	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.234	mg/L	1	0.0500
Dissolved Manganese		0.299	mg/L	1	0.0250

continued . . .

sample 28647 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Molybdenum		0.727	mg/L	1	0.0500
Dissolved Nickel		0.0530	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		3.42	mg/L	10	0.00500
Dissolved Vanadium		0.0810	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		39.5	mg/L	10	0.0500
Dissolved Lithium		0.382	mg/L	1	0.00500

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8252	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		1.66	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		0.00300	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		0.247	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		0.109	mg/L	1	0.0250
Dissolved Molybdenum		<0.0500	mg/L	1	0.0500
Dissolved Nickel		0.452	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		0.118	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		9.60	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		44.8	mg/L	10	0.0500
Dissolved Lithium		0.640	mg/L	1	0.00500

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8252	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		6.31	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		0.114	mg/L	1	0.0250
Dissolved Molybdenum		0.100	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		4.42	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		32.7	mg/L	10	0.0500
Dissolved Lithium		0.403	mg/L	1	0.00500

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8252	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		0.0590	mg/L	1	0.0100
Dissolved Boron		7.78	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		0.00300	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		1.28	mg/L	1	0.0500
Dissolved Manganese		0.931	mg/L	1	0.0250
Dissolved Molybdenum		<0.0500	mg/L	1	0.0500
Dissolved Nickel		0.0680	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		4.34	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250

continued . . .

sample 28653 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		35.9	mg/L	10	0.0500
Dissolved Lithium		0.474	mg/L	1	0.00500

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8252	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		9.08	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		0.00300	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		3.63	mg/L	10	0.0500
Dissolved Manganese		0.254	mg/L	1	0.0250
Dissolved Molybdenum		<0.0500	mg/L	1	0.0500
Dissolved Nickel		0.0470	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		3.54	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		47.5	mg/L	10	0.0500
Dissolved Lithium		0.365	mg/L	1	0.00500

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8252	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		9.14	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		0.00300	mg/L	1	0.00250

continued . . .

sample 28657 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		3.75	mg/L	10	0.0500
Dissolved Manganese		0.275	mg/L	1	0.0250
Dissolved Molybdenum		<0.0500	mg/L	1	0.0500
Dissolved Nickel		0.0470	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		3.50	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		47.9	mg/L	10	0.0500
Dissolved Lithium		0.354	mg/L	1	0.00500

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8252	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		1.90	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		0.00300	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.146	mg/L	1	0.0500
Dissolved Nickel		0.234	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		0.0780	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		9.73	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		31.7	mg/L	10	0.0500
Dissolved Lithium		0.492	mg/L	1	0.00500

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8240	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		4.35	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		1.14	mg/L	1	0.0500
Dissolved Manganese		0.200	mg/L	1	0.0250
Dissolved Molybdenum		0.106	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		5.65	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		41.0	mg/L	10	0.0500
Dissolved Lithium		0.427	mg/L	1	0.00500

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8240	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		8.49	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.191	mg/L	1	0.0500
Dissolved Manganese		0.0660	mg/L	1	0.0250
Dissolved Molybdenum		0.0890	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100

continued . . .

sample 28873 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		4.58	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		44.4	mg/L	10	0.0500
Dissolved Lithium		0.525	mg/L	1	0.00500

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8240	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		0.0320	mg/L	1	0.0100
Dissolved Boron		8.28	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		0.0350	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.222	mg/L	1	0.0500
Dissolved Manganese		0.610	mg/L	1	0.0250
Dissolved Molybdenum		0.104	mg/L	1	0.0500
Dissolved Nickel		0.0980	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		3.29	mg/L	10	0.00500
Dissolved Vanadium		0.0330	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		43.5	mg/L	10	0.0500
Dissolved Lithium		0.303	mg/L	1	0.00500

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8240	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130

continued . . .

sample 28933 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		5.96	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.111	mg/L	1	0.0500
Dissolved Manganese		0.428	mg/L	1	0.0250
Dissolved Molybdenum		0.309	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		4.95	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		35.0	mg/L	10	0.0500
Dissolved Lithium		0.360	mg/L	1	0.00500

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	8240	Date Analyzed:	2004-03-16	Analyzed By:	RR
Prep Batch:	7247	Date Prepared:	2004-03-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		2.88	mg/L	10	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		0.344	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		5.70	mg/L	10	0.0500
Dissolved Manganese		0.166	mg/L	1	0.0250
Dissolved Molybdenum		0.133	mg/L	1	0.0500
Dissolved Nickel		1.03	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		0.136	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		7.74	mg/L	10	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250

continued . . .

sample 28935 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		14.0	mg/L	1	0.0500
Dissolved Lithium		0.815	mg/L	1	0.00500

Method Blank (1) QC Batch: 8240

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.0130	mg/L	0.013
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.0100	mg/L	0.01
Dissolved Boron		<0.0500	mg/L	0.05
Dissolved Barium		<0.100	mg/L	0.1
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.0250	mg/L	0.025
Dissolved Cobalt		<0.0250	mg/L	0.025
Dissolved Chromium		<0.0100	mg/L	0.01
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.0250	mg/L	0.025
Dissolved Lead		<0.0100	mg/L	0.01
Dissolved Selenium		<0.0500	mg/L	0.05
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.0250	mg/L	0.025
Dissolved Zinc		<0.0250	mg/L	0.025
Dissolved Silica		<0.0500	mg/L	0.05
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 8252

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.0130	mg/L	0.013
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.0100	mg/L	0.01
Dissolved Boron		<0.0500	mg/L	0.05
Dissolved Barium		<0.100	mg/L	0.1
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.0250	mg/L	0.025
Dissolved Cobalt		<0.0250	mg/L	0.025
Dissolved Chromium		<0.0100	mg/L	0.01
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.0250	mg/L	0.025
Dissolved Lead		<0.0100	mg/L	0.01
Dissolved Selenium		<0.0500	mg/L	0.05
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.0250	mg/L	0.025
Dissolved Zinc		<0.0250	mg/L	0.025
Dissolved Silica		<0.0500	mg/L	0.05
Dissolved Lithium		<0.00500	mg/L	0.005

Laboratory Control Spike (LCS-1) QC Batch: 8240

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.127	0.126	mg/L	1	0.125	<0.000199	102	1	85 - 115	20
Dissolved Aluminum	0.937	0.940	mg/L	1	1.00	<0.00984	94	0	85 - 115	20
Dissolved Arsenic	0.445	0.449	mg/L	1	0.500	<0.00860	89	1	85 - 115	20
Dissolved Boron	0.0426	0.0460	mg/L	1	0.0500	<0.00366	85	8	85 - 115	20
Dissolved Barium	1.04	1.03	mg/L	1	1.00	<0.000984	104	1	85 - 115	20
Dissolved Beryllium	0.0270	0.0270	mg/L	1	0.0250	<0.000532	108	0	85 - 115	20
Dissolved Cadmium	0.247	0.246	mg/L	1	0.250	<0.000577	99	0	85 - 115	20
Dissolved Cobalt	0.257	0.257	mg/L	1	0.250	<0.000630	103	0	85 - 115	20
Dissolved Chromium	0.108	0.107	mg/L	1	0.100	<0.000437	108	1	85 - 115	20
Dissolved Copper	0.130	0.129	mg/L	1	0.125	<0.00164	104	1	85 - 115	20
Dissolved Iron	0.504	0.502	mg/L	1	0.500	<0.00281	101	0	85 - 115	20
Dissolved Manganese	0.255	0.254	mg/L	1	0.250	<0.00296	102	0	85 - 115	20
Dissolved Molybdenum	0.532	0.532	mg/L	1	0.500	<0.00118	106	0	85 - 115	20
Dissolved Nickel	0.248	0.247	mg/L	1	0.250	<0.00126	99	0	85 - 115	20
Dissolved Lead	0.517	0.517	mg/L	1	0.500	<0.00310	103	0	85 - 115	20
Dissolved Selenium	0.428	0.425	mg/L	1	0.500	<0.00370	86	1	85 - 115	20
Dissolved Tin	0.312	0.313	mg/L	1	0.300	<0.00238	104	0	85 - 115	20
Dissolved Strontium	0.0520	0.0520	mg/L	1	0.0500	<0.000457	104	0	85 - 115	20
Dissolved Vanadium	0.264	0.263	mg/L	1	0.250	<0.000651	106	0	85 - 115	20
Dissolved Zinc	0.240	0.239	mg/L	1	0.250	<0.00151	96	0	85 - 115	20
Dissolved Silica [12]	1.05	1.04	mg/L	1	1.00	<0.00632	105	1	85 - 115	
Dissolved Lithium	0.0490	0.0490	mg/L	1	0.0500	<0.00197	98	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8252

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.127	0.126	mg/L	1	0.125	<0.000199	102	1	85 - 115	20

continued . . .

[1]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[2]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.

control spikes continued . . .

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Aluminum		0.937	0.940	mg/L	1	1.00	<0.00984	94	0	85 - 115	20
Dissolved Arsenic		0.445	0.449	mg/L	1	0.500	<0.00860	89	1	85 - 115	20
Dissolved Boron		0.0426	0.0460	mg/L	1	0.0500	<0.00366	85	8	85 - 115	20
Dissolved Barium		1.04	1.03	mg/L	1	1.00	<0.000984	104	1	85 - 115	20
Dissolved Beryllium		0.0270	0.0270	mg/L	1	0.0250	<0.000532	108	0	85 - 115	20
Dissolved Cadmium		0.247	0.246	mg/L	1	0.250	<0.000577	99	0	85 - 115	20
Dissolved Cobalt		0.257	0.257	mg/L	1	0.250	<0.000630	103	0	85 - 115	20
Dissolved Chromium		0.108	0.107	mg/L	1	0.100	<0.000437	108	1	85 - 115	20
Dissolved Copper		0.130	0.129	mg/L	1	0.125	<0.00164	104	1	85 - 115	20
Dissolved Iron		0.504	0.502	mg/L	1	0.500	<0.00281	101	0	85 - 115	20
Dissolved Manganese		0.255	0.254	mg/L	1	0.250	<0.00296	102	0	85 - 115	20
Dissolved Molybdenum		0.532	0.532	mg/L	1	0.500	<0.00118	106	0	85 - 115	20
Dissolved Nickel		0.248	0.247	mg/L	1	0.250	<0.00126	99	0	85 - 115	20
Dissolved Lead		0.517	0.517	mg/L	1	0.500	<0.00310	103	0	85 - 115	20
Dissolved Selenium		0.428	0.425	mg/L	1	0.500	<0.00370	86	1	85 - 115	20
Dissolved Tin		0.312	0.313	mg/L	1	0.300	<0.00238	104	0	85 - 115	20
Dissolved Strontium		0.0520	0.0520	mg/L	1	0.0500	<0.000457	104	0	85 - 115	20
Dissolved Vanadium		0.264	0.263	mg/L	1	0.250	<0.000651	106	0	85 - 115	20
Dissolved Zinc		0.240	0.239	mg/L	1	0.250	<0.00151	96	0	85 - 115	20
Dissolved Silica	[3][4]	1.05	1.04	mg/L	1	1.00	<0.00632	105	1	85 - 115	
Dissolved Lithium		0.0490	0.0490	mg/L	1	0.0500	<0.00197	98	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8240

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver		0.120	0.132	mg/L	1	0.125	<0.000199	96	10	75 - 125	20
Dissolved Aluminum		1.02	1.01	mg/L	1	1.00	<0.00984	102	1	75 - 125	20
Dissolved Arsenic		0.445	0.471	mg/L	1	0.500	<0.00860	89	6	75 - 125	20
Dissolved Boron	[5][6]	4.35	4.35	mg/L	1	0.0500	4.35	0	0	75 - 125	20
Dissolved Barium		1.06	1.06	mg/L	1	1.00	0.022	104	0	75 - 125	20
Dissolved Beryllium		0.0247	0.0247	mg/L	1	0.0250	<0.000532	99	0	75 - 125	20
Dissolved Cadmium		0.259	0.259	mg/L	1	0.250	<0.000577	104	0	75 - 125	20
Dissolved Cobalt		0.232	0.274	mg/L	1	0.250	<0.000630	93	17	75 - 125	20
Dissolved Chromium		0.0920	0.0910	mg/L	1	0.100	<0.000437	92	1	75 - 125	20
Dissolved Copper		0.130	0.130	mg/L	1	0.125	0.002	102	0	75 - 125	20
Dissolved Iron		1.59	1.57	mg/L	1	0.500	1.14	90	1	75 - 125	20
Dissolved Manganese		0.463	0.461	mg/L	1	0.250	0.2	105	0	75 - 125	20
Dissolved Molybdenum	[7][8]	0.580	0.578	mg/L	1	0.500	0.106	95	0	75 - 125	20
Dissolved Nickel		0.268	0.267	mg/L	1	0.250	<0.00126	107	0	75 - 125	20
Dissolved Lead		0.446	0.458	mg/L	1	0.500	<0.00310	89	3	75 - 125	20
Dissolved Selenium		0.512	0.509	mg/L	1	0.500	0.024	98	0	75 - 125	20
Dissolved Tin		0.302	0.302	mg/L	1	0.300	<0.00238	101	0	75 - 125	20

continued . . .

[3]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[4]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[5]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[6]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[7]Changed spike amount from 50 to 0.5 due to concentration in spiking solution.
[8]Changed spike amount from 50 to 0.5 due to concentration in spiking solution.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Strontium	[9][10]	5.65	5.65	mg/L	10	0.0500	5.65	0	0	75 - 125	20
Dissolved Vanadium		0.254	0.253	mg/L	1	0.250	0.013	96	0	75 - 125	20
Dissolved Zinc		0.238	0.241	mg/L	1	0.250	<0.00151	95	1	75 - 125	20
Dissolved Silica	[11][12]	41.0	41.0	mg/L	10	0.500	41	0	0	75 - 125	
Dissolved Lithium		0.477	0.477	mg/L	1	0.0500	0.427	100	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8252

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver		0.130	0.132	mg/L	1	0.125	<0.000199	104	2	75 - 125	20
Dissolved Aluminum		1.19	1.03	mg/L	1	1.00	<0.00984	119	14	75 - 125	20
Dissolved Arsenic		0.502	0.582	mg/L	1	0.500	<0.00860	100	15	75 - 125	20
Dissolved Boron	[13][14]	6.31	6.31	mg/L	1	0.0500	6.31	0	0	75 - 125	20
Dissolved Barium		1.11	1.03	mg/L	1	1.00	0.095	102	7	75 - 125	20
Dissolved Beryllium		0.0270	0.0260	mg/L	1	0.0250	<0.000532	108	4	75 - 125	20
Dissolved Cadmium		0.239	0.223	mg/L	1	0.250	0.001	95	7	75 - 125	20
Dissolved Cobalt		0.246	0.229	mg/L	1	0.250	0.001	98	7	75 - 125	20
Dissolved Chromium		0.108	0.101	mg/L	1	0.100	0.003	105	7	75 - 125	20
Dissolved Copper		0.132	0.136	mg/L	1	0.125	0.007	100	3	75 - 125	20
Dissolved Iron		0.519	0.476	mg/L	1	0.500	0.019	100	9	75 - 125	20
Dissolved Manganese		0.314	0.349	mg/L	1	0.250	0.114	80	10	75 - 125	20
Dissolved Molybdenum	[15][16]	0.698	0.577	mg/L	1	0.500	0.1	120	19	75 - 125	20
Dissolved Nickel		0.255	0.237	mg/L	1	0.250	0.018	95	7	75 - 125	20
Dissolved Lead		0.476	0.446	mg/L	1	0.500	<0.00310	95	6	75 - 125	20
Dissolved Selenium		0.548	0.583	mg/L	1	0.500	0.039	102	6	75 - 125	20
Dissolved Tin		0.333	0.335	mg/L	1	0.300	<0.00238	111	0	75 - 125	20
Dissolved Strontium	[17][18]	4.42	4.42	mg/L	1	0.0500	4.42	0	0	75 - 125	20
Dissolved Vanadium		0.242	0.266	mg/L	1	0.250	0.009	93	9	75 - 125	20
Dissolved Zinc		0.234	0.223	mg/L	1	0.250	<0.00151	94	5	75 - 125	20
Dissolved Silica	[19][20]	32.7	32.7	mg/L	1	0.500	32.7	0	0	75 - 125	
Dissolved Lithium		0.453	0.453	mg/L	1	0.0500	0.403	100	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 8240

[9]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[10]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[11]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[12]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[13]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[14]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[15]Changed spike amount from 50 to 0.5 due to concentration in spiking solution.
[16]Changed spike amount from 50 to 0.5 due to concentration in spiking solution.
[17]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[18]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[19]MS recovery invalid due to required dilution. LCS demonstrates process under control.
[20]MS recovery invalid due to required dilution. LCS demonstrates process under control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.126	101	90 - 110	2004-03-16
Dissolved Aluminum		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Boron		mg/L	1.00	1.08	108	90 - 110	2004-03-16
Dissolved Barium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Cadmium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Cobalt		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Chromium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Copper		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Iron		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Manganese		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Molybdenum		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Nickel		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Lead		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Selenium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Tin		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Strontium		mg/L	1.00	1.03	103	90 - 110	2004-03-16
Dissolved Vanadium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Zinc		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Silica		mg/L	5.00	5.05	101	95 - 105	2004-03-16
Dissolved Lithium		mg/L	1.00	1.04	104	90 - 110	2004-03-16

Standard (CCV-1) QC Batch: 8240

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.125	100	90 - 110	2004-03-16
Dissolved Aluminum		mg/L	1.00	0.986	99	90 - 110	2004-03-16
Dissolved Arsenic		mg/L	1.00	1.00	100	90 - 110	2004-03-16
Dissolved Boron		mg/L	1.00	1.04	104	90 - 110	2004-03-16
Dissolved Barium		mg/L	1.00	0.999	100	90 - 110	2004-03-16
Dissolved Beryllium		mg/L	1.00	1.00	100	90 - 110	2004-03-16
Dissolved Cadmium		mg/L	1.00	1.00	100	90 - 110	2004-03-16
Dissolved Cobalt		mg/L	1.00	0.999	100	90 - 110	2004-03-16
Dissolved Chromium		mg/L	1.00	0.999	100	90 - 110	2004-03-16
Dissolved Copper		mg/L	1.00	0.996	100	90 - 110	2004-03-16
Dissolved Iron		mg/L	1.00	0.999	100	90 - 110	2004-03-16
Dissolved Manganese		mg/L	1.00	1.00	100	90 - 110	2004-03-16
Dissolved Molybdenum		mg/L	1.00	0.995	100	90 - 110	2004-03-16
Dissolved Nickel		mg/L	1.00	1.00	100	90 - 110	2004-03-16
Dissolved Lead		mg/L	1.00	1.00	100	90 - 110	2004-03-16
Dissolved Selenium		mg/L	1.00	1.00	100	90 - 110	2004-03-16
Dissolved Tin		mg/L	1.00	1.00	100	90 - 110	2004-03-16
Dissolved Strontium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Vanadium		mg/L	1.00	0.996	100	90 - 110	2004-03-16
Dissolved Zinc		mg/L	1.00	1.00	100	90 - 110	2004-03-16
Dissolved Silica		mg/L	5.00	4.98	100	90 - 110	2004-03-16
Dissolved Lithium		mg/L	1.00	1.02	102	90 - 110	2004-03-16

Standard (ICV-1) QC Batch: 8252

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.126	101	90 - 110	2004-03-16
Dissolved Aluminum		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Boron		mg/L	1.00	1.08	108	90 - 110	2004-03-16
Dissolved Barium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Cadmium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Cobalt		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Chromium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Copper		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Iron		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Manganese		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Molybdenum		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Nickel		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Lead		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Selenium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Tin		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Strontium		mg/L	1.00	1.03	103	90 - 110	2004-03-16
Dissolved Vanadium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Zinc		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Silica		mg/L	5.00	5.05	101	95 - 105	2004-03-16
Dissolved Lithium		mg/L	1.00	1.04	104	90 - 110	2004-03-16

Standard (CCV-1) QC Batch: 8252

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.125	100	90 - 110	2004-03-16
Dissolved Aluminum		mg/L	1.00	0.986	99	90 - 110	2004-03-16
Dissolved Arsenic		mg/L	1.00	1.03	103	90 - 110	2004-03-16
Dissolved Boron		mg/L	1.00	1.04	104	90 - 110	2004-03-16
Dissolved Barium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Cadmium		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Cobalt		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Chromium		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Copper		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Iron		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Manganese		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Nickel		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Lead		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Selenium		mg/L	1.00	1.03	103	90 - 110	2004-03-16
Dissolved Tin		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Strontium		mg/L	1.00	1.03	103	90 - 110	2004-03-16
Dissolved Vanadium		mg/L	1.00	1.01	101	90 - 110	2004-03-16
Dissolved Zinc		mg/L	1.00	1.02	102	90 - 110	2004-03-16
Dissolved Silica		mg/L	5.00	5.17	103	90 - 110	2004-03-16

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.993	99	90 - 110	2004-03-16

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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 11 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	8490	Date Analyzed:	2004-03-24	Analyzed By:	JH
Prep Batch:	7274	Date Prepared:	2004-03-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.69	μg/L	1	2.50	108	35.8 - 121

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	8490	Date Analyzed:	2004-03-24	Analyzed By:	JH
Prep Batch:	7274	Date Prepared:	2004-03-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.27	μg/L	1	2.50	91	35.8 - 121

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	8490	Date Analyzed:	2004-03-24	Analyzed By:	JH
Prep Batch:	7274	Date Prepared:	2004-03-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.88	μg/L	1	2.50	75	35.8 - 121

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	8490	Date Analyzed:	2004-03-24	Analyzed By:	JH
Prep Batch:	7274	Date Prepared:	2004-03-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.70	μg/L	1	2.50	108	35.8 - 121

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	8490	Date Analyzed:	2004-03-24	Analyzed By:	JH
Prep Batch:	7274	Date Prepared:	2004-03-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.67	μg/L	1	2.50	107	35.8 - 121

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	8490	Date Analyzed:	2004-03-24	Analyzed By:	JH
Prep Batch:	7274	Date Prepared:	2004-03-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.37	μg/L	1	2.50	95	35.8 - 121

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	8490	Date Analyzed:	2004-03-24	Analyzed By:	JH
Prep Batch:	7274	Date Prepared:	2004-03-09	Prepared By:	JH

continued . . .

sample 28657 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.54	μg/L	1	2.50	62	35.8 - 121

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	8490	Date Analyzed:	2004-03-24	Analyzed By:	JH
Prep Batch:	7274	Date Prepared:	2004-03-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.45	μg/L	1	2.50	58	35.8 - 121

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	8490	Date Analyzed:	2004-03-24	Analyzed By:	JH

Prep Batch: 7274 Date Prepared: 2004-03-09 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	µg/L	1	0.500
RDX		<0.500	µg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	µg/L	1	0.500
1,3-Dinitrobenzene		<0.500	µg/L	1	0.500
Tetryl		<0.500	µg/L	1	0.500
Nitrobenzene		<0.500	µg/L	1	0.500
TNT		<0.500	µg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	µg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	µg/L	1	0.500
2-NT		<0.500	µg/L	1	0.500
4-NT		<0.500	µg/L	1	0.500
3-NT		<0.500	µg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.65	µg/L	1	2.50	106	35.8 - 121

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis: Explosives (8330) Analytical Method: S 8330-C18 Prep Method: S 3535A
QC Batch: 8490 Date Analyzed: 2004-03-24 Analyzed By: JH
Prep Batch: 7274 Date Prepared: 2004-03-09 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	µg/L	1	0.500
RDX		<0.500	µg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	µg/L	1	0.500
1,3-Dinitrobenzene		<0.500	µg/L	1	0.500
Tetryl		<0.500	µg/L	1	0.500
Nitrobenzene		<0.500	µg/L	1	0.500
TNT		<0.500	µg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	µg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	µg/L	1	0.500
2-NT		<0.500	µg/L	1	0.500
4-NT		<0.500	µg/L	1	0.500
3-NT		<0.500	µg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.82	µg/L	1	2.50	113	35.8 - 121

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis: Explosives (8330) Analytical Method: S 8330-C18 Prep Method: S 3535A
QC Batch: 8490 Date Analyzed: 2004-03-24 Analyzed By: JH
Prep Batch: 7274 Date Prepared: 2004-03-09 Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.25	μg/L	1	2.50	90	35.8 - 121

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	8492	Date Analyzed:	2004-03-24	Analyzed By:	JH
Prep Batch:	7339	Date Prepared:	2004-03-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.71	μg/L	1	2.50	108	35.8 - 121

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	8492	Date Analyzed:	2004-03-24	Analyzed By:	JH
Prep Batch:	7339	Date Prepared:	2004-03-10	Prepared By:	JH

continued . . .

sample 28935 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.29	μg/L	1	2.50	92	35.8 - 121

Method Blank (1) QC Batch: 8490

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.75	μg/L	1	2.50	110	35.8 - 121

Method Blank (1) QC Batch: 8492

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
1,3-Dinitrobenzene		<0.500	µg/L	0.5
Tetryl		<0.500	µg/L	0.5
Nitrobenzene		<0.500	µg/L	0.5
TNT		<0.500	µg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	µg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	µg/L	0.5
2-NT		<0.500	µg/L	0.5
4-NT		<0.500	µg/L	0.5
3-NT		<0.500	µg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.68	µg/L	1	2.50	107	35.8 - 121

Laboratory Control Spike (LCS-1) QC Batch: 8490

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.45	2.54	µg/L	1	2.50	<0.196	98	4	52.3 - 129	20
RDX	2.62	2.84	µg/L	1	2.50	<0.364	105	8	65.7 - 117	20
1,3,5-Trinitrobenzene	3.08	3.30	µg/L	1	2.50	<0.114	123	7	30.3 - 141	20
1,3-Dinitrobenzene	2.23	2.12	µg/L	1	2.50	<0.108	89	5	45.9 - 139	20
Tetryl	2.79	2.35	µg/L	1	2.50	<0.200	112	17	49 - 129	20
Nitrobenzene	2.91	2.63	µg/L	1	2.50	<0.0990	116	10	0 - 133	20
TNT	1.77	1.85	µg/L	1	2.50	<0.116	71	4	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.08	2.27	µg/L	1	2.50	<0.146	83	9	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.11	2.42	µg/L	1	2.50	<0.183	84	14	44.8 - 130	20
2-NT	2.60	2.71	µg/L	1	2.50	<0.139	104	4	44.9 - 128	20
4-NT	2.67	2.52	µg/L	1	2.50	<0.0851	107	6	47.8 - 123	20
3-NT	2.74	3.15	µg/L	1	2.50	<0.176	110	14	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	1.65	1.48	µg/L	1	2.50	66	59	42 - 125

Laboratory Control Spike (LCS-1) QC Batch: 8492

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.47	2.56	µg/L	1	2.50	<0.196	99	4	52.3 - 129	20
RDX	2.88	2.90	µg/L	1	2.50	<0.364	115	1	65.7 - 117	20
1,3,5-Trinitrobenzene	2.59	2.49	µg/L	1	2.50	<0.114	104	4	30.3 - 141	20
1,3-Dinitrobenzene	2.27	2.21	µg/L	1	2.50	<0.108	91	3	45.9 - 139	20
Tetryl	2.61	2.51	µg/L	1	2.50	<0.200	104	4	49 - 129	20
Nitrobenzene	2.61	2.56	µg/L	1	2.50	<0.0990	104	2	0 - 133	20
TNT	1.93	1.85	µg/L	1	2.50	<0.116	77	4	67.8 - 126	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
4-amino-DNT / 2-amino-DNT	1.90	2.25	μg/L	1	2.50	<0.146	76	17	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.54	2.48	μg/L	1	2.50	<0.183	102	2	44.8 - 130	20
2-NT	2.81	2.58	μg/L	1	2.50	<0.139	112	8	44.9 - 128	20
4-NT	2.85	2.78	μg/L	1	2.50	<0.0851	114	2	47.8 - 123	20
3-NT	3.07	3.28	μg/L	1	2.50	<0.176	123	7	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.36	2.35	μg/L	1	2.50	94	94	42 - 125

Standard (ICV-1) QC Batch: 8490

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		μg/L	500	545	109	85 - 115	2004-03-24
RDX		μg/L	500	569	114	85 - 115	2004-03-24
1,3,5-Trinitrobenzene		μg/L	500	496	99	85 - 115	2004-03-24
1,3-Dinitrobenzene		μg/L	500	473	95	85 - 115	2004-03-24
Tetryl		μg/L	500	558	112	85 - 115	2004-03-24
Nitrobenzene		μg/L	500	560	112	85 - 115	2004-03-24
TNT		μg/L	500	438	88	85 - 115	2004-03-24
4-amino-DNT / 2-amino-DNT		μg/L	500	493	99	85 - 115	2004-03-24
2,6-DNT / 2,4-DNT		μg/L	500	509	102	85 - 115	2004-03-24
2-NT		μg/L	500	521	104	85 - 115	2004-03-24
4-NT		μg/L	500	435	87	85 - 115	2004-03-24
3-NT		μg/L	500	541	108	85 - 115	2004-03-24

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.23	μg/L	1	2.50	89	85 - 115

Standard (CCV-1) QC Batch: 8490

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		μg/L	500	528	106	85 - 115	2004-03-24
RDX		μg/L	500	516	103	85 - 115	2004-03-24
1,3,5-Trinitrobenzene		μg/L	500	539	108	85 - 115	2004-03-24
1,3-Dinitrobenzene		μg/L	500	499	100	85 - 115	2004-03-24
Tetryl		μg/L	500	560	112	85 - 115	2004-03-24
Nitrobenzene		μg/L	500	558	112	85 - 115	2004-03-24
TNT		μg/L	500	466	93	85 - 115	2004-03-24
4-amino-DNT / 2-amino-DNT		μg/L	500	530	106	85 - 115	2004-03-24
2,6-DNT / 2,4-DNT		μg/L	500	525	105	85 - 115	2004-03-24
2-NT		μg/L	500	555	111	85 - 115	2004-03-24
4-NT		μg/L	500	531	106	85 - 115	2004-03-24
3-NT		μg/L	500	560	112	85 - 115	2004-03-24

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.26	µg/L	1	2.50	90	85 - 115

Standard (ICV-1) QC Batch: 8492

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	496	99	85 - 115	2004-03-24
RDX		µg/L	500	553	111	85 - 115	2004-03-24
1,3,5-Trinitrobenzene		µg/L	500	460	92	85 - 115	2004-03-24
1,3-Dinitrobenzene		µg/L	500	467	93	85 - 115	2004-03-24
Tetryl		µg/L	500	544	109	85 - 115	2004-03-24
Nitrobenzene		µg/L	500	556	111	85 - 115	2004-03-24
TNT		µg/L	500	446	89	85 - 115	2004-03-24
4-amino-DNT / 2-amino-DNT		µg/L	500	514	103	85 - 115	2004-03-24
2,6-DNT / 2,4-DNT		µg/L	500	532	106	85 - 115	2004-03-24
2-NT		µg/L	500	537	107	85 - 115	2004-03-24
4-NT		µg/L	500	512	102	85 - 115	2004-03-24
3-NT		µg/L	500	546	109	85 - 115	2004-03-24

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.33	µg/L	1	2.50	93	85 - 115

Standard (CCV-1) QC Batch: 8492

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	510	102	85 - 115	2004-03-24
RDX		µg/L	500	534	107	85 - 115	2004-03-24
1,3,5-Trinitrobenzene		µg/L	500	525	105	85 - 115	2004-03-24
1,3-Dinitrobenzene		µg/L	500	496	99	85 - 115	2004-03-24
Tetryl		µg/L	500	562	112	85 - 115	2004-03-24
Nitrobenzene		µg/L	500	565	113	85 - 115	2004-03-24
TNT		µg/L	500	465	93	85 - 115	2004-03-24
4-amino-DNT / 2-amino-DNT		µg/L	500	506	101	85 - 115	2004-03-24
2,6-DNT / 2,4-DNT		µg/L	500	504	101	85 - 115	2004-03-24
2-NT		µg/L	500	458	92	85 - 115	2004-03-24
4-NT		µg/L	500	517	103	85 - 115	2004-03-24
3-NT		µg/L	500	532	106	85 - 115	2004-03-24

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.30	µg/L	1	2.50	92	85 - 115

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	8144	Date Analyzed:	2004-03-11	Analyzed By:	BC
Prep Batch:	7232	Date Prepared:	2004-03-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	8144	Date Analyzed:	2004-03-11	Analyzed By:	BC
Prep Batch:	7232	Date Prepared:	2004-03-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	8144	Date Analyzed:	2004-03-11	Analyzed By:	BC
Prep Batch:	7232	Date Prepared:	2004-03-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	8144	Date Analyzed:	2004-03-11	Analyzed By:	BC
Prep Batch:	7232	Date Prepared:	2004-03-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	8144	Date Analyzed:	2004-03-11	Analyzed By:	BC
Prep Batch:	7232	Date Prepared:	2004-03-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	8144	Date Analyzed:	2004-03-11	Analyzed By:	BC
Prep Batch:	7232	Date Prepared:	2004-03-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	8144	Date Analyzed:	2004-03-11	Analyzed By:	BC
Prep Batch:	7232	Date Prepared:	2004-03-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	8144	Date Analyzed:	2004-03-11	Analyzed By:	BC
Prep Batch:	7232	Date Prepared:	2004-03-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	8144	Date Analyzed:	2004-03-11	Analyzed By:	BC
Prep Batch:	7232	Date Prepared:	2004-03-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	8144	Date Analyzed:	2004-03-11	Analyzed By:	BC

Prep Batch: 7232 Date Prepared: 2004-03-10 Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/A
QC Batch: 8144 Date Analyzed: 2004-03-11 Analyzed By: BC
Prep Batch: 7232 Date Prepared: 2004-03-10 Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		0.000300	mg/L	1	0.000200

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/A
QC Batch: 8279 Date Analyzed: 2004-03-17 Analyzed By: BC
Prep Batch: 7369 Date Prepared: 2004-03-16 Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/A
QC Batch: 8279 Date Analyzed: 2004-03-17 Analyzed By: BC
Prep Batch: 7369 Date Prepared: 2004-03-16 Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Method Blank (1) QC Batch: 8144

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Method Blank (1) QC Batch: 8279

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Laboratory Control Spike (LCS-1) QC Batch: 8144

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.000990	0.00100	mg/L	1	0.00100	<0.0000329	99	1	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8279

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00107	0.00109	mg/L	1	0.00100	<0.0000329	107	2	82 - 120	20
Total Mercury	0.00107	0.00109	mg/L	1	0.00100	<0.0000329	107	2	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8144

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00100	0.00100	mg/L	1	0.00100	<0.0000329	100	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) QC Batch: 8144

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00102	0.00103	mg/L	1	0.00100	<0.0000329	102	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8279

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00112	0.00111	mg/L	1	0.00100	<0.0000329	112	1	80 - 120	20
Total Mercury	0.00112	0.00111	mg/L	1	0.00100	<0.0000329	112	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 8144

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.000930	93	80 - 120	2004-03-11

Standard (CCV-1) QC Batch: 8144

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.000990	99	80 - 120	2004-03-11

Standard (CCV-2) QC Batch: 8144

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.000990	99	80 - 120	2004-03-11

Standard (ICV-1) QC Batch: 8279

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00110	110	80 - 120	2004-03-17

Standard (CCV-1) QC Batch: 8279

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00105	105	80 - 120	2004-03-17

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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 11 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	8116	Date Analyzed:	2004-03-04	Analyzed By:	JR
Prep Batch:	7244	Date Prepared:	2004-03-04	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.730	mg/L	1	0.200
Chloride		692	mg/L	50	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		6.79	mg/L	5	0.100
Sulfate		2810	mg/L	500	1.00

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	8116	Date Analyzed:	2004-03-04	Analyzed By:	JR
Prep Batch:	7244	Date Prepared:	2004-03-04	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.900	mg/L	1	0.200
Chloride		935	mg/L	100	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		17.3	mg/L	5	0.100
Sulfate		3830	mg/L	500	1.00

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	8116	Date Analyzed:	2004-03-04	Analyzed By:	JR
Prep Batch:	7244	Date Prepared:	2004-03-04	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		1.20	mg/L	1	0.200
Chloride		2420	mg/L	500	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		68.4	mg/L	50	0.100
Sulfate		6660	mg/L	500	1.00

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	8148	Date Analyzed:	2004-03-05	Analyzed By:	JR

Prep Batch: 7273 Date Prepared: 2004-03-05 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		645	mg/L	50	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		9.07	mg/L	5	0.100
Sulfate		3320	mg/L	500	1.00

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis: Ion Chromatography Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 8148 Date Analyzed: 2004-03-05 Analyzed By: JR
Prep Batch: 7273 Date Prepared: 2004-03-05 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.690	mg/L	1	0.200
Chloride		595	mg/L	50	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		<0.100	mg/L	1	0.100
Sulfate		3050	mg/L	500	1.00

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis: Ion Chromatography Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 8148 Date Analyzed: 2004-03-05 Analyzed By: JR
Prep Batch: 7273 Date Prepared: 2004-03-05 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.800	mg/L	1	0.200
Chloride		706	mg/L	50	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		<0.100	mg/L	1	0.100
Sulfate		2740	mg/L	500	1.00

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis: Ion Chromatography Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 8148 Date Analyzed: 2004-03-05 Analyzed By: JR
Prep Batch: 7273 Date Prepared: 2004-03-05 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.790	mg/L	1	0.200

continued . . .

sample 28657 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		698	mg/L	50	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		<0.100	mg/L	1	0.100
Sulfate		2820	mg/L	500	1.00

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	8148	Date Analyzed:	2004-03-05	Analyzed By:	JR
Prep Batch:	7273	Date Prepared:	2004-03-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.940	mg/L	1	0.200
Chloride		1210	mg/L	100	2.00
Fluoride		4.32	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		42.4	mg/L	10	0.100
Sulfate		4610	mg/L	500	1.00

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	8139	Date Analyzed:	2004-03-05	Analyzed By:	JR
Prep Batch:	7264	Date Prepared:	2004-03-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		613	mg/L	50	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		12.1	mg/L	5	0.100
Sulfate		3340	mg/L	500	1.00

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	8139	Date Analyzed:	2004-03-05	Analyzed By:	JR
Prep Batch:	7264	Date Prepared:	2004-03-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		804	mg/L	50	2.00

continued . . .

sample 28873 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		18.1	mg/L	5	0.100
Sulfate		4540	mg/L	500	1.00

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	8139	Date Analyzed:	2004-03-05	Analyzed By:	JR
Prep Batch:	7264	Date Prepared:	2004-03-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.680	mg/L	1	0.200
Chloride		627	mg/L	50	2.00
Fluoride		3.44	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		<0.100	mg/L	1	0.100
Sulfate		3100	mg/L	500	1.00

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	8182	Date Analyzed:	2004-03-09	Analyzed By:	JR
Prep Batch:	7302	Date Prepared:	2004-03-09	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		559	mg/L	50	2.00
Fluoride		3.97	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		8.97	mg/L	5	0.100
Sulfate		4380	mg/L	500	1.00

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	8182	Date Analyzed:	2004-03-09	Analyzed By:	JR
Prep Batch:	7302	Date Prepared:	2004-03-09	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		3.50	mg/L	5	0.200
Chloride		5550	mg/L	500	2.00
Fluoride		<2.00	mg/L	10	0.200

continued . . .

sample 28935 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		160	mg/L	50	0.100
Sulfate		13200	mg/L	1000	1.00

Method Blank (1) QC Batch: 8116

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 8139

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 8148

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 8182

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 8116

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.44	2.43	mg/L	1	2.50	<0.0800	98	0	88 - 106	4
Chloride	11.8	11.8	mg/L	1	12.5	<0.310	94	0	79 - 112	3
Fluoride	2.41	2.42	mg/L	1	2.50	<0.0400	96	0	82 - 109	2
Nitrite-N	2.41	2.44	mg/L	1	2.50	<0.0100	96	1	83 - 113	2
Nitrate-N	2.40	2.41	mg/L	1	2.50	<0.0100	96	0	86 - 111	1.4
Sulfate	12.2	12.2	mg/L	1	12.5	<0.160	98	0	89 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8139

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.48	2.47	mg/L	1	2.50	<0.0800	99	0	88 - 106	4
Chloride	11.7	11.7	mg/L	1	12.5	<0.310	94	0	79 - 112	3
Fluoride	2.39	2.39	mg/L	1	2.50	<0.0400	96	0	82 - 109	2
Nitrite-N	2.42	2.39	mg/L	1	2.50	<0.0100	97	1	83 - 113	2
Nitrate-N	2.42	2.43	mg/L	1	2.50	<0.0100	97	0	86 - 111	1.4
Sulfate	12.2	12.2	mg/L	1	12.5	<0.160	98	0	89 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8148

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.37	2.43	mg/L	1	2.50	<0.0800	95	2	88 - 106	4
Chloride	11.7	11.7	mg/L	1	12.5	<0.310	94	0	79 - 112	3
Fluoride	2.40	2.41	mg/L	1	2.50	<0.0400	96	0	82 - 109	2
Nitrite-N	2.39	2.42	mg/L	1	2.50	<0.0100	96	1	83 - 113	2
Nitrate-N	2.38	2.40	mg/L	1	2.50	<0.0100	95	1	86 - 111	1.4
Sulfate	12.2	12.2	mg/L	1	12.5	<0.160	98	0	89 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8182

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.46	2.43	mg/L	1	2.50	<0.0800	98	1	88 - 106	4
Chloride	11.6	11.6	mg/L	1	12.5	<0.310	93	0	79 - 112	3
Fluoride	2.37	2.38	mg/L	1	2.50	<0.0400	95	0	82 - 109	2
Nitrite-N	2.39	2.39	mg/L	1	2.50	<0.0100	96	0	83 - 113	2
Nitrate-N	2.39	2.40	mg/L	1	2.50	<0.0100	96	0	86 - 111	1.4
Sulfate	12.0	12.1	mg/L	1	12.5	<0.160	96	1	89 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8116

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1210	1190	mg/L	500	2.50	<40.0	97	2	84 - 121	3
Chloride	6860	6790	mg/L	500	12.5	1270	89	1	79 - 111	3
Fluoride	1210	1200	mg/L	500	2.50	<20.0	97	1	93 - 104	2
Nitrite-N	1220	1210	mg/L	500	2.50	<5.00	98	1	85 - 111	2
Nitrate-N	1210	1220	mg/L	500	2.50	<5.00	97	1	77 - 119	2
Sulfate	9850	9670	mg/L	500	12.5	3830	96	2	80 - 110	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8139

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1230	1250	mg/L	500	2.50	<40.0	98	2	84 - 121	3
Chloride	6440	6440	mg/L	500	12.5	989	87	0	79 - 111	3
Fluoride	1200	1190	mg/L	500	2.50	<20.0	96	1	93 - 104	2
Nitrite-N	1210	1210	mg/L	500	2.50	<5.00	97	0	85 - 111	2
Nitrate-N	1200	1210	mg/L	500	2.50	<5.00	96	1	77 - 119	2
Sulfate	8840	8840	mg/L	500	12.5	3100	92	0	80 - 110	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8148

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1190	1190	mg/L	500	2.50	<40.0	95	0	84 - 121	3
Chloride	6490	6440	mg/L	500	12.5	981	88	1	79 - 111	3
Fluoride	1200	1190	mg/L	500	2.50	<20.0	96	1	93 - 104	2
Nitrite-N	1210	1200	mg/L	500	2.50	<5.00	97	1	85 - 111	2
Nitrate-N	1200	1200	mg/L	500	2.50	<5.00	96	0	77 - 119	2
Sulfate	9430	9270	mg/L	500	12.5	3323	98	2	80 - 110	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8182

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1200	1200	mg/L	500	2.50	<40.0	96	0	84 - 121	3
Chloride	6340	6330	mg/L	500	12.5	951	86	0	79 - 111	3
Fluoride	1180	1200	mg/L	500	2.50	<20.0	94	2	93 - 104	2
Nitrite-N	1210	1200	mg/L	500	2.50	<5.00	97	1	85 - 111	2
Nitrate-N	1200	1210	mg/L	500	2.50	<5.00	96	1	77 - 119	2
Sulfate	10300	10200	mg/L	500	12.5	4380	95	1	80 - 110	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 8116

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.36	94	90 - 110	2004-03-04
Chloride		mg/L	12.5	11.6	93	90 - 110	2004-03-04
Fluoride		mg/L	2.50	2.41	96	90 - 110	2004-03-04
Nitrite-N		mg/L	2.50	2.39	96	90 - 110	2004-03-04
Nitrate-N		mg/L	2.50	2.29	92	90 - 110	2004-03-04
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-03-04

Standard (CCV-1) QC Batch: 8116

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	2004-03-04
Chloride		mg/L	12.5	11.8	94	85 - 115	2004-03-04
Fluoride		mg/L	2.50	2.44	98	85 - 115	2004-03-04
Nitrite-N		mg/L	2.50	2.42	97	85 - 115	2004-03-04
Nitrate-N		mg/L	2.50	2.31	92	85 - 115	2004-03-04
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-03-04

Standard (ICV-1) QC Batch: 8139

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.38	95	90 - 110	2004-03-05
Chloride		mg/L	12.5	11.7	94	90 - 110	2004-03-05
Fluoride		mg/L	2.50	2.41	96	90 - 110	2004-03-05
Nitrite-N		mg/L	2.50	2.39	96	90 - 110	2004-03-05
Nitrate-N		mg/L	2.50	2.29	92	90 - 110	2004-03-05
Sulfate		mg/L	12.5	11.7	94	90 - 110	2004-03-05

Standard (CCV-1) QC Batch: 8139

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	2004-03-05

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.7	94	85 - 115	2004-03-05
Fluoride		mg/L	2.50	2.39	96	85 - 115	2004-03-05
Nitrite-N		mg/L	2.50	2.38	95	85 - 115	2004-03-05
Nitrate-N		mg/L	2.50	2.31	92	85 - 115	2004-03-05
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-03-05

Standard (ICV-1) QC Batch: 8148

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.35	94	90 - 110	2004-03-05
Chloride		mg/L	12.5	11.4	91	90 - 110	2004-03-05
Fluoride		mg/L	2.50	2.36	94	90 - 110	2004-03-05
Nitrite-N		mg/L	2.50	2.34	94	90 - 110	2004-03-05
Nitrate-N		mg/L	2.50	2.25	90	90 - 110	2004-03-05
Sulfate		mg/L	12.5	11.3	90	90 - 110	2004-03-05

Standard (CCV-1) QC Batch: 8148

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.38	95	90 - 110	2004-03-05
Chloride		mg/L	12.5	11.7	94	85 - 115	2004-03-05
Fluoride		mg/L	2.50	2.41	96	85 - 115	2004-03-05
Nitrite-N		mg/L	2.50	2.39	96	85 - 115	2004-03-05
Nitrate-N		mg/L	2.50	2.29	92	85 - 115	2004-03-05
Sulfate		mg/L	12.5	11.7	94	85 - 115	2004-03-05

Standard (ICV-1) QC Batch: 8182

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.40	96	90 - 110	2004-03-09
Chloride		mg/L	12.5	11.5	92	90 - 110	2004-03-09
Fluoride		mg/L	2.50	2.37	95	90 - 110	2004-03-09
Nitrite-N		mg/L	2.50	2.36	94	90 - 110	2004-03-09
Nitrate-N		mg/L	2.50	2.30	92	90 - 110	2004-03-09
Sulfate		mg/L	12.5	11.5	92	90 - 110	2004-03-09

Standard (CCV-1) QC Batch: 8182

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.38	95	90 - 110	2004-03-09

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.6	93	85 - 115	2004-03-09
Fluoride		mg/L	2.50	2.38	95	85 - 115	2004-03-09
Nitrite-N		mg/L	2.50	2.38	95	85 - 115	2004-03-09
Nitrate-N		mg/L	2.50	2.30	92	85 - 115	2004-03-09
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-03-09

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	8157	Date Analyzed:	2004-03-04	Analyzed By:	MK
Prep Batch:	7279	Date Prepared:	2004-03-04	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.20	s.u.	1	0.00

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	8157	Date Analyzed:	2004-03-04	Analyzed By:	MK
Prep Batch:	7279	Date Prepared:	2004-03-04	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.20	s.u.	1	0.00

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	8157	Date Analyzed:	2004-03-04	Analyzed By:	MK
Prep Batch:	7279	Date Prepared:	2004-03-04	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.20	s.u.	1	0.00

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	8158	Date Analyzed:	2004-03-05	Analyzed By:	MK
Prep Batch:	7280	Date Prepared:	2004-03-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.23	s.u.	1	0.00

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	8158	Date Analyzed:	2004-03-05	Analyzed By:	MK
Prep Batch:	7280	Date Prepared:	2004-03-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		6.46	s.u.	1	0.00

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	8158	Date Analyzed:	2004-03-05	Analyzed By:	MK
Prep Batch:	7280	Date Prepared:	2004-03-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		5.85	s.u.	1	0.00

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	8158	Date Analyzed:	2004-03-05	Analyzed By:	MK
Prep Batch:	7280	Date Prepared:	2004-03-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		5.88	s.u.	1	0.00

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	8158	Date Analyzed:	2004-03-05	Analyzed By:	MK
Prep Batch:	7280	Date Prepared:	2004-03-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.74	s.u.	1	0.00

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	8159	Date Analyzed:	2004-03-05	Analyzed By:	JR
Prep Batch:	7282	Date Prepared:	2004-03-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.83	s.u.	1	0.00

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	8159	Date Analyzed:	2004-03-05	Analyzed By:	JR

Prep Batch: 7282 Date Prepared: 2004-03-05 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.07	s.u.	1	0.00

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis: pH Analytical Method: SM 4500-H+ Prep Method: N/A
QC Batch: 8159 Date Analyzed: 2004-03-05 Analyzed By: JR
Prep Batch: 7282 Date Prepared: 2004-03-05 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.67	s.u.	1	0.00

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis: pH Analytical Method: SM 4500-H+ Prep Method: N/A
QC Batch: 8160 Date Analyzed: 2004-03-09 Analyzed By: MK
Prep Batch: 7283 Date Prepared: 2004-03-09 Prepared By: MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.47	s.u.	1	0.00

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis: pH Analytical Method: SM 4500-H+ Prep Method: N/A
QC Batch: 8160 Date Analyzed: 2004-03-09 Analyzed By: MK
Prep Batch: 7283 Date Prepared: 2004-03-09 Prepared By: MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.28	s.u.	1	0.00

Duplicate (1) QC Batch: 8157

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.20	7.20	s.u.	1	0	

Duplicate (1) QC Batch: 8158

continued . . .

duplicate continued . . .

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.23	7.23	s.u.	1	0	

Duplicate (1) QC Batch: 8159

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.62	7.67	s.u.	1	1	

Duplicate (1) QC Batch: 8160

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.28	7.28	s.u.	1	0	

Standard (ICV-1) QC Batch: 8157

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-03-04

Standard (CCV-1) QC Batch: 8157

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-03-04

Standard (ICV-1) QC Batch: 8158

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.09	101	98 - 102	2004-03-05

Standard (CCV-1) QC Batch: 8158

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.10	101	98 - 102	2004-03-05

Standard (ICV-1) QC Batch: 8159

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.03	100	98 - 102	2004-03-05

Standard (CCV-1) QC Batch: 8159

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.03	100	98 - 102	2004-03-05

Standard (ICV-1) QC Batch: 8160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.02	100	98 - 102	2004-03-09

Standard (CCV-1) QC Batch: 8160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.04	100	98 - 102	2004-03-09

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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 41 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8069	Date Analyzed:	2004-03-08	Analyzed By:	RC
Prep Batch:	7156	Date Prepared:	2004-03-05	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.0226	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.0548	mg/L	0.001	5.00
1-Methylnaphthalene		0.0702	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28645 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		0.00761	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		0.00598	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.00546	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0113	mg/L	0.001	80.0	14	0 - 69.3
Phenol-d5		0.00643	mg/L	0.001	80.0	8	0 - 52.5
Nitrobenzene-d5		0.0247	mg/L	0.001	80.0	31	21.1 - 93.6
2-Fluorobiphenyl		0.0260	mg/L	0.001	80.0	32	25.4 - 87
2,4,6-Tribromophenol		0.0368	mg/L	0.001	80.0	46	14.9 - 110
Terphenyl-d14		0.0350	mg/L	0.001	80.0	44	28.9 - 124

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8069	Date Analyzed:	2004-03-08	Analyzed By:	RC
Prep Batch:	7156	Date Prepared:	2004-03-05	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.0175	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.0459	mg/L	0.001	5.00

continued . . .

sample 28647 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1-Methylnaphthalene		0.0536	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		0.00769	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		0.00675	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.00837	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28647 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.00770	mg/L	0.001	80.0	10	0 - 69.3
Phenol-d5		0.00401	mg/L	0.001	80.0	5	0 - 52.5
Nitrobenzene-d5	[1]	0.0171	mg/L	0.001	80.0	21	21.1 - 93.6
2-Fluorobiphenyl	[2]	0.0172	mg/L	0.001	80.0	22	25.4 - 87
2,4,6-Tribromophenol		0.0306	mg/L	0.001	80.0	38	14.9 - 110
Terphenyl-d14		0.0312	mg/L	0.001	80.0	39	28.9 - 124

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8069	Date Analyzed:	2004-03-08	Analyzed By:	RC
Prep Batch:	7156	Date Prepared:	2004-03-05	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00

continued . . .

[1]Sample surrogate recovery out of limits due to sample matrix.
[2]Sample surrogate recovery out of limits due to sample matrix.

sample 28649 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28649 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0140	mg/L	0.001	80.0	18	0 - 69.3
Phenol-d5		0.00700	mg/L	0.001	80.0	9	0 - 52.5
Nitrobenzene-d5		0.0295	mg/L	0.001	80.0	37	21.1 - 93.6
2-Fluorobiphenyl		0.0333	mg/L	0.001	80.0	42	25.4 - 87
2,4,6-Tribromophenol		0.0343	mg/L	0.001	80.0	43	14.9 - 110
Terphenyl-d14		0.0467	mg/L	0.001	80.0	58	28.9 - 124

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8249	Date Analyzed:	2004-03-15	Analyzed By:	RC
Prep Batch:	7239	Date Prepared:	2004-03-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28651 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.0581	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.122	mg/L	0.001	5.00
1-Methylnaphthalene		0.116	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		0.00673	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		0.0128	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		0.0118	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28651 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.0148	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0106	mg/L	0.001	80.0	13	0 - 69.3
Phenol-d5		0.00601	mg/L	0.001	80.0	8	0 - 52.5
Nitrobenzene-d5		0.0291	mg/L	0.001	80.0	36	21.1 - 93.6
2-Fluorobiphenyl		0.0301	mg/L	0.001	80.0	38	25.4 - 87
2,4,6-Tribromophenol		0.0434	mg/L	0.001	80.0	54	14.9 - 110
Terphenyl-d14		0.0419	mg/L	0.001	80.0	52	28.9 - 124

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8249	Date Analyzed:	2004-03-15	Analyzed By:	RC
Prep Batch:	7239	Date Prepared:	2004-03-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28653 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.170	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.407	mg/L	0.001	5.00
1-Methylnaphthalene		0.350	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		0.0355	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28653 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		0.0510	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.151	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		0.0150	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0118	mg/L	0.001	80.0	15	0 - 69.3
Phenol-d5		0.00582	mg/L	0.001	80.0	7	0 - 52.5
Nitrobenzene-d5		0.0297	mg/L	0.001	80.0	37	21.1 - 93.6
2-Fluorobiphenyl		0.0272	mg/L	0.001	80.0	34	25.4 - 87
2,4,6-Tribromophenol		0.0206	mg/L	0.001	80.0	26	14.9 - 110
Terphenyl-d14		0.0258	mg/L	0.001	80.0	32	28.9 - 124

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8296	Date Analyzed:	2004-03-18	Analyzed By:	RC
Prep Batch:	7239	Date Prepared:	2004-03-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.250	mg/L	0.05	5.00
n-Nitrosodimethylamine		<0.250	mg/L	0.05	5.00
2-Picoline		<0.250	mg/L	0.05	5.00
Methyl methanesulfonate		<0.250	mg/L	0.05	5.00
Ethyl methanesulfonate		<0.250	mg/L	0.05	5.00
Phenol		<0.250	mg/L	0.05	5.00
Aniline		<0.250	mg/L	0.05	5.00
bis(2-chloroethyl)ether		<0.250	mg/L	0.05	5.00
2-Chlorophenol		<0.250	mg/L	0.05	5.00
1,3-Dichlorobenzene (meta)		<0.250	mg/L	0.05	5.00
1,4-Dichlorobenzene (para)		<0.250	mg/L	0.05	5.00
Benzyl alcohol		<0.250	mg/L	0.05	5.00
1,2-Dichlorobenzene (ortho)		<0.250	mg/L	0.05	5.00
2-Methylphenol		<0.250	mg/L	0.05	5.00
bis(2-chloroisopropyl)ether		<0.250	mg/L	0.05	5.00
4-Methylphenol / 3-Methylphenol		<0.250	mg/L	0.05	5.00
n-Nitrosodi-n-propylamine		<0.250	mg/L	0.05	5.00
Hexachloroethane		<0.250	mg/L	0.05	5.00
Acetophenone		<0.250	mg/L	0.05	5.00
Nitrobenzene		<0.250	mg/L	0.05	5.00
n-Nitrosopiperidine		<0.250	mg/L	0.05	5.00
Isophorone		<0.250	mg/L	0.05	5.00
2-Nitrophenol		<0.250	mg/L	0.05	5.00
2,4-Dimethylphenol		<0.250	mg/L	0.05	5.00
bis(2-chloroethoxy)methane		<0.250	mg/L	0.05	5.00
2,4-Dichlorophenol		<0.250	mg/L	0.05	5.00
1,2,4-Trichlorobenzene		<0.250	mg/L	0.05	5.00
Benzoic acid		<1.00	mg/L	0.05	20.0
Naphthalene		2.09	mg/L	0.05	5.00
a,a-Dimethylphenethylamine		<0.250	mg/L	0.05	5.00
4-Chloroaniline		<0.250	mg/L	0.05	5.00
2,6-Dichlorophenol		<0.250	mg/L	0.05	5.00
Hexachlorobutadiene		<0.250	mg/L	0.05	5.00
n-Nitroso-di-n-butylamine		<0.250	mg/L	0.05	5.00
4-Chloro-3-methylphenol		<0.250	mg/L	0.05	5.00
2-Methylnaphthalene		11.7	mg/L	0.05	5.00
1-Methylnaphthalene		9.09	mg/L	0.05	5.00
1,2,4,5-Tetrachlorobenzene		<0.250	mg/L	0.05	5.00
Hexachlorocyclopentadiene		<0.250	mg/L	0.05	5.00
2,4,6-Trichlorophenol		<0.250	mg/L	0.05	5.00
2,4,5-Trichlorophenol		<0.250	mg/L	0.05	5.00
2-Chloronaphthalene		<0.250	mg/L	0.05	5.00
1-Chloronaphthalene		<0.250	mg/L	0.05	5.00
2-Nitroaniline		<0.250	mg/L	0.05	5.00
Dimethylphthalate		<0.250	mg/L	0.05	5.00
Acenaphthylene		<0.250	mg/L	0.05	5.00
2,6-Dinitrotoluene		<0.250	mg/L	0.05	5.00

continued . . .

sample 28655 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
3-Nitroaniline		<0.250	mg/L	0.05	5.00
Acenaphthene		0.760	mg/L	0.05	5.00
2,4-Dinitrophenol		<1.00	mg/L	0.05	20.0
Dibenzofuran		<0.250	mg/L	0.05	5.00
Pentachlorobenzene		<0.250	mg/L	0.05	5.00
4-Nitrophenol		<0.250	mg/L	0.05	5.00
2,4-Dinitrotoluene		<0.250	mg/L	0.05	5.00
1-Naphthylamine		<0.250	mg/L	0.05	5.00
2,3,4,6-Tetrachlorophenol		<0.250	mg/L	0.05	5.00
2-Naphthylamine		<0.250	mg/L	0.05	5.00
Fluorene		1.40	mg/L	0.05	5.00
4-Chlorophenyl-phenylether		<0.250	mg/L	0.05	5.00
Diethylphthalate		<0.250	mg/L	0.05	5.00
4-Nitroaniline		<0.250	mg/L	0.05	5.00
Diphenylhydrazine		<0.250	mg/L	0.05	5.00
4,6-Dinitro-2-methylphenol		<0.250	mg/L	0.05	5.00
Diphenylamine		1.02	mg/L	0.05	5.00
4-Bromophenyl-phenylether		<0.250	mg/L	0.05	5.00
Phenacetin		<0.250	mg/L	0.05	5.00
Hexachlorobenzene		<0.250	mg/L	0.05	5.00
4-Aminobiphenyl		<0.250	mg/L	0.05	5.00
Pentachlorophenol		<0.250	mg/L	0.05	5.00
Anthracene		<0.250	mg/L	0.05	5.00
Pentachloronitrobenzene		<0.250	mg/L	0.05	5.00
Pronamide		<0.250	mg/L	0.05	5.00
Phenanthrene		2.79	mg/L	0.05	5.00
Di-n-butylphthalate		<0.250	mg/L	0.05	5.00
Fluoranthene		<0.250	mg/L	0.05	5.00
Benzidine		<0.750	mg/L	0.05	15.0
Pyrene		0.378	mg/L	0.05	5.00
p-Dimethylaminoazobenzene		<0.250	mg/L	0.05	5.00
Butylbenzylphthalate		<0.250	mg/L	0.05	5.00
Benzo(a)anthracene		<0.250	mg/L	0.05	5.00
3,3-Dichlorobenzidine		<0.250	mg/L	0.05	5.00
Chrysene		<0.250	mg/L	0.05	5.00
bis(2-ethylhexyl)phthalate		<0.500	mg/L	0.05	10.0
Di-n-octylphthalate		<0.250	mg/L	0.05	5.00
Benzo(b)fluoranthene		<0.250	mg/L	0.05	5.00
Benzo(k)fluoranthene		<0.250	mg/L	0.05	5.00
7,12-Dimethylbenz(a)anthracene		<0.250	mg/L	0.05	5.00
Benzo(a)pyrene		<0.250	mg/L	0.05	5.00
3-Methylcholanthrene		<0.250	mg/L	0.05	5.00
Dibenzo(a,j)acridine		<0.250	mg/L	0.05	5.00
Indeno(1,2,3-cd)pyrene		<0.250	mg/L	0.05	5.00
Dibenzo(a,h)anthracene		<0.250	mg/L	0.05	5.00
Benzo(g,h,i)perylene		<0.250	mg/L	0.05	5.00

continued . . .

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol	[3]	5.65	mg/L	0.05	80.0	141	0 - 69.3
Phenol-d5		1.04	mg/L	0.05	80.0	26	0 - 52.5
Nitrobenzene-d5	[4]	8.55	mg/L	0.05	80.0	214	21.1 - 93.6
2-Fluorobiphenyl		1.59	mg/L	0.05	80.0	40	25.4 - 87
2,4,6-Tribromophenol		1.24	mg/L	0.05	80.0	31	14.9 - 110
Terphenyl-d14		1.74	mg/L	0.05	80.0	44	28.9 - 124

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8296	Date Analyzed:	2004-03-18	Analyzed By:	RC
Prep Batch:	7239	Date Prepared:	2004-03-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.250	mg/L	0.05	5.00
n-Nitrosodimethylamine		<0.250	mg/L	0.05	5.00
2-Picoline		<0.250	mg/L	0.05	5.00
Methyl methanesulfonate		<0.250	mg/L	0.05	5.00
Ethyl methanesulfonate		<0.250	mg/L	0.05	5.00
Phenol		<0.250	mg/L	0.05	5.00
Aniline		<0.250	mg/L	0.05	5.00
bis(2-chloroethyl)ether		<0.250	mg/L	0.05	5.00
2-Chlorophenol		<0.250	mg/L	0.05	5.00
1,3-Dichlorobenzene (meta)		<0.250	mg/L	0.05	5.00
1,4-Dichlorobenzene (para)		<0.250	mg/L	0.05	5.00
Benzyl alcohol		<0.250	mg/L	0.05	5.00
1,2-Dichlorobenzene (ortho)		<0.250	mg/L	0.05	5.00
2-Methylphenol		<0.250	mg/L	0.05	5.00
bis(2-chloroisopropyl)ether		<0.250	mg/L	0.05	5.00
4-Methylphenol / 3-Methylphenol		<0.250	mg/L	0.05	5.00
n-Nitrosodi-n-propylamine		<0.250	mg/L	0.05	5.00
Hexachloroethane		<0.250	mg/L	0.05	5.00
Acetophenone		<0.250	mg/L	0.05	5.00
Nitrobenzene		<0.250	mg/L	0.05	5.00
n-Nitrosopiperidine		<0.250	mg/L	0.05	5.00
Isophorone		<0.250	mg/L	0.05	5.00
2-Nitrophenol		<0.250	mg/L	0.05	5.00
2,4-Dimethylphenol		<0.250	mg/L	0.05	5.00
bis(2-chloroethoxy)methane		<0.250	mg/L	0.05	5.00
2,4-Dichlorophenol		<0.250	mg/L	0.05	5.00
1,2,4-Trichlorobenzene		<0.250	mg/L	0.05	5.00
Benzoic acid		<1.00	mg/L	0.05	20.0
Naphthalene		1.76	mg/L	0.05	5.00
a,a-Dimethylphenethylamine		<0.250	mg/L	0.05	5.00
4-Chloroaniline		<0.250	mg/L	0.05	5.00

continued . . .

[3]Sample surrogate recovery out of limits due to sample matrix and dilution.
[4]Sample surrogate recovery out of limits due to sample matrix and dilution.

sample 28657 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,6-Dichlorophenol		<0.250	mg/L	0.05	5.00
Hexachlorobutadiene		<0.250	mg/L	0.05	5.00
n-Nitroso-di-n-butylamine		<0.250	mg/L	0.05	5.00
4-Chloro-3-methylphenol		<0.250	mg/L	0.05	5.00
2-Methylnaphthalene		9.58	mg/L	0.05	5.00
1-Methylnaphthalene		7.52	mg/L	0.05	5.00
1,2,4,5-Tetrachlorobenzene		<0.250	mg/L	0.05	5.00
Hexachlorocyclopentadiene		<0.250	mg/L	0.05	5.00
2,4,6-Trichlorophenol		<0.250	mg/L	0.05	5.00
2,4,5-Trichlorophenol		<0.250	mg/L	0.05	5.00
2-Chloronaphthalene		<0.250	mg/L	0.05	5.00
1-Chloronaphthalene		<0.250	mg/L	0.05	5.00
2-Nitroaniline		<0.250	mg/L	0.05	5.00
Dimethylphthalate		<0.250	mg/L	0.05	5.00
Acenaphthylene		<0.250	mg/L	0.05	5.00
2,6-Dinitrotoluene		<0.250	mg/L	0.05	5.00
3-Nitroaniline		<0.250	mg/L	0.05	5.00
Acenaphthene		0.697	mg/L	0.05	5.00
2,4-Dinitrophenol		<1.00	mg/L	0.05	20.0
Dibenzofuran		<0.250	mg/L	0.05	5.00
Pentachlorobenzene		<0.250	mg/L	0.05	5.00
4-Nitrophenol		<0.250	mg/L	0.05	5.00
2,4-Dinitrotoluene		<0.250	mg/L	0.05	5.00
1-Naphthylamine		<0.250	mg/L	0.05	5.00
2,3,4,6-Tetrachlorophenol		<0.250	mg/L	0.05	5.00
2-Naphthylamine		<0.250	mg/L	0.05	5.00
Fluorene		<0.250	mg/L	0.05	5.00
4-Chlorophenyl-phenylether		<0.250	mg/L	0.05	5.00
Diethylphthalate		<0.250	mg/L	0.05	5.00
4-Nitroaniline		<0.250	mg/L	0.05	5.00
Diphenylhydrazine		<0.250	mg/L	0.05	5.00
4,6-Dinitro-2-methylphenol		<0.250	mg/L	0.05	5.00
Diphenylamine		<0.250	mg/L	0.05	5.00
4-Bromophenyl-phenylether		<0.250	mg/L	0.05	5.00
Phenacetin		<0.250	mg/L	0.05	5.00
Hexachlorobenzene		<0.250	mg/L	0.05	5.00
4-Aminobiphenyl		<0.250	mg/L	0.05	5.00
Pentachlorophenol		<0.250	mg/L	0.05	5.00
Anthracene		<0.250	mg/L	0.05	5.00
Pentachloronitrobenzene		<0.250	mg/L	0.05	5.00
Pronamide		<0.250	mg/L	0.05	5.00
Phenanthrene		2.56	mg/L	0.05	5.00
Di-n-butylphthalate		<0.250	mg/L	0.05	5.00
Fluoranthene		<0.250	mg/L	0.05	5.00
Benzidine		<0.750	mg/L	0.05	15.0
Pyrene		<0.250	mg/L	0.05	5.00
p-Dimethylaminoazobenzene		<0.250	mg/L	0.05	5.00
Butylbenzylphthalate		<0.250	mg/L	0.05	5.00
Benzo(a)anthracene		<0.250	mg/L	0.05	5.00
3,3-Dichlorobenzidine		<0.250	mg/L	0.05	5.00
Chrysene		<0.250	mg/L	0.05	5.00

continued . . .

sample 28657 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
bis(2-ethylhexyl)phthalate		<0.500	mg/L	0.05	10.0
Di-n-octylphthalate		<0.250	mg/L	0.05	5.00
Benzo(b)fluoranthene		<0.250	mg/L	0.05	5.00
Benzo(k)fluoranthene		<0.250	mg/L	0.05	5.00
7,12-Dimethylbenz(a)anthracene		<0.250	mg/L	0.05	5.00
Benzo(a)pyrene		<0.250	mg/L	0.05	5.00
3-Methylcholanthrene		<0.250	mg/L	0.05	5.00
Dibenzo(a,j)acridine		<0.250	mg/L	0.05	5.00
Indeno(1,2,3-cd)pyrene		<0.250	mg/L	0.05	5.00
Dibenzo(a,h)anthracene		<0.250	mg/L	0.05	5.00
Benzo(g,h,i)perylene		<0.250	mg/L	0.05	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.380	mg/L	0.05	80.0	10	0 - 69.3
Phenol-d5		0.740	mg/L	0.05	80.0	18	0 - 52.5
Nitrobenzene-d5	[5]	7.01	mg/L	0.05	80.0	175	21.1 - 93.6
2-Fluorobiphenyl		2.50	mg/L	0.05	80.0	62	25.4 - 87
2,4,6-Tribromophenol		2.02	mg/L	0.05	80.0	50	14.9 - 110
Terphenyl-d14		2.27	mg/L	0.05	80.0	57	28.9 - 124

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8249	Date Analyzed:	2004-03-15	Analyzed By:	RC
Prep Batch:	7239	Date Prepared:	2004-03-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00

continued . . .

[5]Sample surrogate recovery out of limits due to sample matrix and dilution.

sample 28659 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28659 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0172	mg/L	0.001	80.0	22	0 - 69.3
Phenol-d5		0.00887	mg/L	0.001	80.0	11	0 - 52.5
Nitrobenzene-d5		0.0298	mg/L	0.001	80.0	37	21.1 - 93.6
2-Fluorobiphenyl		0.0422	mg/L	0.001	80.0	53	25.4 - 87
2,4,6-Tribromophenol		0.0502	mg/L	0.001	80.0	63	14.9 - 110
Terphenyl-d14		0.0400	mg/L	0.001	80.0	50	28.9 - 124

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8249	Date Analyzed:	2004-03-15	Analyzed By:	RC
Prep Batch:	7239	Date Prepared:	2004-03-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28871 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		0.00564	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28871 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0153	mg/L	0.001	80.0	19	0 - 69.3
Phenol-d5		0.00780	mg/L	0.001	80.0	10	0 - 52.5
Nitrobenzene-d5		0.0365	mg/L	0.001	80.0	46	21.1 - 93.6
2-Fluorobiphenyl		0.0420	mg/L	0.001	80.0	52	25.4 - 87
2,4,6-Tribromophenol		0.0462	mg/L	0.001	80.0	58	14.9 - 110
Terphenyl-d14		0.0467	mg/L	0.001	80.0	58	28.9 - 124

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8249	Date Analyzed:	2004-03-15	Analyzed By:	RC
Prep Batch:	7239	Date Prepared:	2004-03-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.0382	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.0967	mg/L	0.001	5.00
1-Methylnaphthalene		0.0870	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		0.00834	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		0.0158	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28873 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		0.0144	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.0245	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.00793	mg/L	0.001	80.0	10	0 - 69.3
Phenol-d5		0.00451	mg/L	0.001	80.0	6	0 - 52.5
Nitrobenzene-d5		0.0230	mg/L	0.001	80.0	29	21.1 - 93.6
2-Fluorobiphenyl		0.0211	mg/L	0.001	80.0	26	25.4 - 87
2,4,6-Tribromophenol		0.0261	mg/L	0.001	80.0	33	14.9 - 110
Terphenyl-d14		0.0259	mg/L	0.001	80.0	32	28.9 - 124

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8249	Date Analyzed:	2004-03-15	Analyzed By:	RC
Prep Batch:	7239	Date Prepared:	2004-03-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.00940	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.0108	mg/L	0.001	5.00
1-Methylnaphthalene		0.0115	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28875 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		0.0123	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0181	mg/L	0.001	80.0	23	0 - 69.3
Phenol-d5		0.00994	mg/L	0.001	80.0	12	0 - 52.5

continued . . .

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0366	mg/L	0.001	80.0	46	21.1 - 93.6
2-Fluorobiphenyl		0.0399	mg/L	0.001	80.0	50	25.4 - 87
2,4,6-Tribromophenol		0.0482	mg/L	0.001	80.0	60	14.9 - 110
Terphenyl-d14		0.0458	mg/L	0.001	80.0	57	28.9 - 124

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8249	Date Analyzed:	2004-03-15	Analyzed By:	RC
Prep Batch:	7239	Date Prepared:	2004-03-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.0253	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.0839	mg/L	0.001	5.00
1-Methylnaphthalene		0.0733	mg/L	0.001	5.00

continued . . .

sample 28933 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		0.00779	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.00717	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28933 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0120	mg/L	0.001	80.0	15	0 - 69.3
Phenol-d5		0.00622	mg/L	0.001	80.0	8	0 - 52.5
Nitrobenzene-d5		0.0254	mg/L	0.001	80.0	32	21.1 - 93.6
2-Fluorobiphenyl		0.0282	mg/L	0.001	80.0	35	25.4 - 87
2,4,6-Tribromophenol		0.0327	mg/L	0.001	80.0	41	14.9 - 110
Terphenyl-d14		0.0339	mg/L	0.001	80.0	42	28.9 - 124

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	8249	Date Analyzed:	2004-03-15	Analyzed By:	RC
Prep Batch:	7239	Date Prepared:	2004-03-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28935 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 28935 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0205	mg/L	0.001	80.0	26	0 - 69.3
Phenol-d5		0.0116	mg/L	0.001	80.0	14	0 - 52.5
Nitrobenzene-d5		0.0410	mg/L	0.001	80.0	51	21.1 - 93.6
2-Fluorobiphenyl		0.0473	mg/L	0.001	80.0	59	25.4 - 87
2,4,6-Tribromophenol		0.0456	mg/L	0.001	80.0	57	14.9 - 110
Terphenyl-d14		0.0546	mg/L	0.001	80.0	68	28.9 - 124

Method Blank (1) QC Batch: 8069

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0189	mg/L	0.001	80.0	24	0 - 969.3
Phenol-d5		0.0144	mg/L	0.001	80.0	18	0 - 52.5
Nitrobenzene-d5		0.0247	mg/L	0.001	80.0	31	21.1 - 93.6
2-Fluorobiphenyl		0.0253	mg/L	0.001	80.0	32	25.4 - 87
2,4,6-Tribromophenol		0.0221	mg/L	0.001	80.0	28	14.9 - 110
Terphenyl-d14		0.0461	mg/L	0.001	80.0	58	28.9 - 124

Method Blank (1) QC Batch: 8249

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0189	mg/L	0.001	80.0	24	0 - 969.3
Phenol-d5		0.0132	mg/L	0.001	80.0	16	0 - 52.5
Nitrobenzene-d5		0.0242	mg/L	0.001	80.0	30	21.1 - 93.6
2-Fluorobiphenyl		0.0255	mg/L	0.001	80.0	32	25.4 - 87
2,4,6-Tribromophenol		0.0230	mg/L	0.001	80.0	29	14.9 - 110
Terphenyl-d14		0.0449	mg/L	0.001	80.0	56	28.9 - 124

Method Blank (1) QC Batch: 8296

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0186	mg/L	0.001	80.0	23	0 - 969.3
Phenol-d5		0.0126	mg/L	0.001	80.0	16	0 - 52.5
Nitrobenzene-d5		0.0241	mg/L	0.001	80.0	30	21.1 - 93.6
2-Fluorobiphenyl		0.0252	mg/L	0.001	80.0	32	25.4 - 87
2,4,6-Tribromophenol		0.0223	mg/L	0.001	80.0	28	14.9 - 110
Terphenyl-d14		0.0443	mg/L	0.001	80.0	55	28.9 - 124

Laboratory Control Spike (LCS-1) QC Batch: 8069

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	13.9	14.2	mg/L	1	80.0	<0.490	17	2	0 - 52.1	20
2-Chlorophenol	30.7	31.1	mg/L	1	80.0	<1.63	38	1	9.7 - 98.2	20
1,4-Dichlorobenzene (para)	30.4	30.6	mg/L	1	80.0	<1.93	38	1	18.1 - 111	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
n-Nitrosodi-n-propylamine	33.3	34.0	mg/L	1	80.0	<2.26	42	2	36.6 - 121	20
1,2,4-Trichlorobenzene	33.2	33.2	mg/L	1	80.0	<1.52	42	0	20.8 - 112	20
4-Chloro-3-methylphenol	49.5	50.0	mg/L	1	80.0	<1.60	62	1	14.3 - 102	20
Acenaphthene	47.9	48.1	mg/L	1	80.0	<1.58	60	0	32.6 - 123	20
4-Nitrophenol	9.26	9.50	mg/L	1	80.0	<3.83	12	2	0 - 51.9	20
2,4-Dinitrotoluene	64.8	65.0	mg/L	1	80.0	<2.09	81	0	32.6 - 138	20
Pentachlorophenol	40.3	43.1	mg/L	1	80.0	<3.04	50	7	0 - 121	20
Pyrene	64.4	64.5	mg/L	1	80.0	<1.81	80	0	38.4 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	15.2	15.9	mg/L	1	80.0	19	20	0 - 69.3
Phenol-d5	10.8	11.2	mg/L	1	80.0	14	14	0 - 52.5
Nitrobenzene-d5	25.3	25.4	mg/L	1	80.0	32	32	21.1 - 93.6
2-Fluorobiphenyl	29.3	29.2	mg/L	1	80.0	37	36	25.4 - 87
2,4,6-Tribromophenol	44.5	44.7	mg/L	1	80.0	56	56	14.9 - 110
Terphenyl-d14	49.2	49.2	mg/L	1	80.0	62	62	28.9 - 124

Laboratory Control Spike (LCS-1) QC Batch: 8249

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	25.8	25.0	mg/L	1	80.0	<0.490	32	3	0 - 52.1	20
2-Chlorophenol	44.3	44.1	mg/L	1	80.0	<1.63	55	0	9.7 - 98.2	20
1,4-Dichlorobenzene (para)	40.4	40.2	mg/L	1	80.0	<1.93	50	0	18.1 - 111	20
n-Nitrosodi-n-propylamine	45.0	45.4	mg/L	1	80.0	<2.26	56	1	36.6 - 121	20
1,2,4-Trichlorobenzene	45.9	46.1	mg/L	1	80.0	<1.52	57	0	20.8 - 112	20
4-Chloro-3-methylphenol	52.2	53.4	mg/L	1	80.0	<1.60	65	2	14.3 - 102	20
Acenaphthene	54.2	54.1	mg/L	1	80.0	<1.58	68	0	32.6 - 123	20
4-Nitrophenol [6][7]	44.5	45.8	mg/L	1	80.0	<3.83	56	3	0 - 51.9	20
2,4-Dinitrotoluene	64.5	64.6	mg/L	1	80.0	<2.09	81	0	32.6 - 138	20
Pentachlorophenol	45.7	45.1	mg/L	1	80.0	<3.04	57	1	0 - 121	20
Pyrene	77.3	77.6	mg/L	1	80.0	<1.81	97	0	38.4 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	26.2	26.2	mg/L	1	80.0	33	33	0 - 69.3
Phenol-d5	19.5	19.6	mg/L	1	80.0	24	24	0 - 52.5
Nitrobenzene-d5	33.7	33.8	mg/L	1	80.0	42	42	21.1 - 93.6
2-Fluorobiphenyl	37.9	37.9	mg/L	1	80.0	47	47	25.4 - 87
2,4,6-Tribromophenol	46.2	45.7	mg/L	1	80.0	58	57	14.9 - 110
Terphenyl-d14	59.3	59.5	mg/L	1	80.0	74	74	28.9 - 124

Laboratory Control Spike (LCS-1) QC Batch: 8296

[6]The average of the spike compounds shows that the process is in control.
[7]The average of the spike compounds shows that the process is in control.

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	24.3	25.0	mg/L	1	80.0	<0.490	30	3	0 - 52.1	20
2-Chlorophenol	42.3	43.2	mg/L	1	80.0	<1.63	53	2	9.7 - 98.2	20
1,4-Dichlorobenzene (para)	40.3	40.3	mg/L	1	80.0	<1.93	50	0	18.1 - 111	20
n-Nitrosodi-n-propylamine	42.8	44.2	mg/L	1	80.0	<2.26	54	3	36.6 - 121	20
1,2,4-Trichlorobenzene	45.8	46.2	mg/L	1	80.0	<1.52	57	1	20.8 - 112	20
4-Chloro-3-methylphenol	51.1	51.6	mg/L	1	80.0	<1.60	64	1	14.3 - 102	20
Acenaphthene	54.2	54.3	mg/L	1	80.0	<1.58	68	0	32.6 - 123	20
4-Nitrophenol	36.8	36.6	mg/L	1	80.0	<3.83	46	0	0 - 51.9	20
2,4-Dinitrotoluene	62.8	62.6	mg/L	1	80.0	<2.09	78	0	32.6 - 138	20
Pentachlorophenol	43.8	43.5	mg/L	1	80.0	<3.04	55	1	0 - 121	20
Pyrene	77.9	77.4	mg/L	1	80.0	<1.81	97	1	38.4 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	26.0	25.8	mg/L	1	80.0	32	32	0 - 69.3
Phenol-d5	18.8	19.2	mg/L	1	80.0	24	24	0 - 52.5
Nitrobenzene-d5	33.4	33.8	mg/L	1	80.0	42	42	21.1 - 93.6
2-Fluorobiphenyl	37.8	37.8	mg/L	1	80.0	47	47	25.4 - 87
2,4,6-Tribromophenol	45.1	45.4	mg/L	1	80.0	56	57	14.9 - 110
Terphenyl-d14	58.8	58.2	mg/L	1	80.0	74	73	28.9 - 124

Matrix Spike (MS-1) QC Batch: 8069

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	22.2	22.4	mg/L	1	80.0	<0.490	28	1	0 - 59.4	
2-Chlorophenol	53.8	53.3	mg/L	1	80.0	<1.63	67	1	33.87 - 76.65	
1,4-Dichlorobenzene (para)	50.7	51.4	mg/L	1	80.0	<1.93	63	1	5.66 - 106.63	
n-Nitrosodi-n-propylamine	57.7	57.5	mg/L	1	80.0	<2.26	72	0	2.12 - 116.53	
1,2,4-Trichlorobenzene	58.1	57.6	mg/L	1	80.0	<1.52	73	1	8.26 - 101.73	
4-Chloro-3-methylphenol [8][9]	62.1	61.8	mg/L	1	80.0	<1.60	78	0	49.08 - 66.06	
Acenaphthene	63.2	63.7	mg/L	1	80.0	<1.58	79	1	10.76 - 107.89	
4-Nitrophenol	8.62	8.82	mg/L	1	80.0	<3.83	11	2	0 - 70.4	
2,4-Dinitrotoluene	69.3	69.0	mg/L	1	80.0	<2.09	87	0	0 - 140	
Pentachlorophenol	52.8	52.2	mg/L	1	80.0	<3.04	66	1	0 - 121	
Pyrene	66.7	66.8	mg/L	1	80.0	<1.81	83	0	13.81 - 106.27	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol	25.4	25.6	mg/L	1	80	32	32	7.07 - 72.13
Phenol-d5	17.6	17.7	mg/L	1	80	22	22	0 - 67.01
Nitrobenzene-d5	43.6	43.2	mg/L	1	80	54	54	32.4 - 110.8
2-Fluorobiphenyl	46.3	46.5	mg/L	1	80	58	58	46.84 - 91.48
2,4,6-Tribromophenol	49.6	50.3	mg/L	1	80	62	63	29.39 - 110.7
Terphenyl-d14	50.8	50.9	mg/L	1	80	64	64	34.1 - 95.34

[8]The average of the matrix spike compounds shows that the process is in control.
[9]The average of the matrix spike compounds shows that the process is in control.

Matrix Spike (MS-1) QC Batch: 8249

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol		11.0	10.6	mg/L	1	80.0	<0.490	14	4	0 - 59.4	
2-Chlorophenol		37.6	37.3	mg/L	1	80.0	<1.63	47	1	33.87 - 76.65	
1,4-Dichlorobenzene (para)		39.3	39.1	mg/L	1	80.0	<1.93	49	0	5.66 - 106.63	
n-Nitrosodi-n-propylamine		43.7	45.4	mg/L	1	80.0	<2.26	55	4	2.12 - 116.53	
1,2,4-Trichlorobenzene		46.7	46.1	mg/L	1	80.0	<1.52	58	1	8.26 - 101.73	
4-Chloro-3-methylphenol	[10][11]	54.0	54.6	mg/L	1	80.0	<1.60	68	1	49.08 - 66.06	
Acenaphthene		59.3	59.2	mg/L	1	80.0	<1.58	74	0	10.76 - 107.89	
4-Nitrophenol		18.5	21.9	mg/L	1	80.0	<3.83	23	17	0 - 70.4	
2,4-Dinitrotoluene		65.8	66.7	mg/L	1	80.0	<2.09	82	1	0 - 140	
Pentachlorophenol		63.2	63.9	mg/L	1	80.0	<3.04	79	1	0 - 121	
Pyrene		62.6	62.9	mg/L	1	80.0	<1.81	78	0	13.81 - 106.27	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol	14.2	14.6	mg/L	1	80	18	18	7.07 - 72.13
Phenol-d5	8.50	8.57	mg/L	1	80	11	11	0 - 67.01
Nitrobenzene-d5	34.4	33.9	mg/L	1	80	43	42	32.4 - 110.8
2-Fluorobiphenyl	39.0	38.9	mg/L	1	80	49	49	46.84 - 91.48
2,4,6-Tribromophenol	53.5	52.8	mg/L	1	80	67	66	29.39 - 110.7
Terphenyl-d14	56.0	56.3	mg/L	1	80	70	70	34.1 - 95.34

Standard (CCV-1) QC Batch: 8069

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	61.9	103	80 - 120	2004-03-08
1,4-Dichlorobenzene (para)		mg/L	60.0	61.0	102	80 - 120	2004-03-08
2-Nitrophenol		mg/L	60.0	67.8	113	80 - 120	2004-03-08
2,4-Dichlorophenol		mg/L	60.0	68.2	114	80 - 120	2004-03-08
Hexachlorobutadiene		mg/L	60.0	66.4	111	80 - 120	2004-03-08
4-Chloro-3-methylphenol		mg/L	60.0	67.7	113	80 - 120	2004-03-08
2,4,6-Trichlorophenol		mg/L	60.0	66.1	110	80 - 120	2004-03-08
Acenaphthene		mg/L	60.0	65.0	108	80 - 120	2004-03-08
Diphenylamine		mg/L	60.0	67.0	112	80 - 120	2004-03-08
Pentachlorophenol		mg/L	60.0	56.3	94	80 - 120	2004-03-08
Fluoranthene		mg/L	60.0	67.6	113	80 - 120	2004-03-08
Di-n-octylphthalate		mg/L	60.0	70.0	117	80 - 120	2004-03-08
Benzo(a)pyrene		mg/L	60.0	65.0	108	80 - 120	2004-03-08

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		65.9	mg/L	1	60.0	110	80 - 120
Phenol-d5		64.2	mg/L	1	60.0	107	80 - 120
Nitrobenzene-d5		63.0	mg/L	1	60.0	105	80 - 120
2-Fluorobiphenyl		65.5	mg/L	1	60.0	109	80 - 120

continued . . .

[10]The average of the spike compounds shows that the process is in control.
[11]The average of the spike compounds shows that the process is in control.

standard continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,6-Tribromophenol		69.3	mg/L	1	60.0	116	80 - 120
Terphenyl-d14		68.2	mg/L	1	60.0	114	80 - 120

Standard (CCV-1) QC Batch: 8249

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	57.3	95	80 - 120	2004-03-15
1,4-Dichlorobenzene (para)		mg/L	60.0	60.7	101	80 - 120	2004-03-15
2-Nitrophenol		mg/L	60.0	66.5	111	80 - 120	2004-03-15
2,4-Dichlorophenol		mg/L	60.0	71.0	118	80 - 120	2004-03-15
Hexachlorobutadiene		mg/L	60.0	64.6	108	80 - 120	2004-03-15
4-Chloro-3-methylphenol		mg/L	60.0	63.8	106	80 - 120	2004-03-15
2,4,6-Trichlorophenol		mg/L	60.0	69.1	115	80 - 120	2004-03-15
Acenaphthene		mg/L	60.0	64.8	108	80 - 120	2004-03-15
Diphenylamine		mg/L	60.0	67.1	112	80 - 120	2004-03-15
Pentachlorophenol		mg/L	60.0	58.5	98	80 - 120	2004-03-15
Fluoranthene		mg/L	60.0	65.4	109	80 - 120	2004-03-15
Di-n-octylphthalate		mg/L	60.0	63.7	106	80 - 120	2004-03-15
Benzo(a)pyrene		mg/L	60.0	65.1	108	80 - 120	2004-03-15

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		64.1	mg/L	1	60.0	107	80 - 120
Phenol-d5		59.7	mg/L	1	60.0	100	80 - 120
Nitrobenzene-d5		58.8	mg/L	1	60.0	98	80 - 120
2-Fluorobiphenyl		66.0	mg/L	1	60.0	110	80 - 120
2,4,6-Tribromophenol		67.3	mg/L	1	60.0	112	80 - 120
Terphenyl-d14		63.7	mg/L	1	60.0	106	80 - 120

Standard (CCV-1) QC Batch: 8296

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	54.6	91	80 - 120	2004-03-18
1,4-Dichlorobenzene (para)		mg/L	60.0	61.7	103	80 - 120	2004-03-18
2-Nitrophenol		mg/L	60.0	65.0	108	80 - 120	2004-03-18
2,4-Dichlorophenol		mg/L	60.0	70.3	117	80 - 120	2004-03-18
Hexachlorobutadiene		mg/L	60.0	66.3	110	80 - 120	2004-03-18
4-Chloro-3-methylphenol		mg/L	60.0	66.6	111	80 - 120	2004-03-18
2,4,6-Trichlorophenol		mg/L	60.0	64.0	107	80 - 120	2004-03-18
Acenaphthene		mg/L	60.0	63.0	105	80 - 120	2004-03-18
Diphenylamine		mg/L	60.0	67.7	113	80 - 120	2004-03-18
Pentachlorophenol		mg/L	60.0	55.8	93	80 - 120	2004-03-18
Fluoranthene		mg/L	60.0	68.1	114	80 - 120	2004-03-18
Di-n-octylphthalate		mg/L	60.0	70.3	117	80 - 120	2004-03-18
Benzo(a)pyrene		mg/L	60.0	65.3	109	80 - 120	2004-03-18

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		64.6	mg/L	1	60.0	108	80 - 120
Phenol-d5		59.7	mg/L	1	60.0	100	80 - 120
Nitrobenzene-d5		60.2	mg/L	1	60.0	100	80 - 120
2-Fluorobiphenyl		63.6	mg/L	1	60.0	106	80 - 120
2,4,6-Tribromophenol		68.3	mg/L	1	60.0	114	80 - 120
Terphenyl-d14		67.6	mg/L	1	60.0	113	80 - 120

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	8121	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7252	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		9680	mg/L	1	5.00

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	8121	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7252	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		8800	mg/L	1	5.00

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	8121	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7252	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		13600	mg/L	1	5.00

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	8121	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7252	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		8020	mg/L	1	5.00

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	8121	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7252	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		7160	mg/L	1	5.00

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	8121	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7252	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		7400	mg/L	1	5.00

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	8121	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7252	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		7400	mg/L	1	5.00

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	8121	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7252	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		9460	mg/L	1	5.00

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	8121	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7252	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		6820	mg/L	1	5.00

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	8121	Date Analyzed:	2004-03-08	Analyzed By:	JG

Prep Batch: 7252 Date Prepared: 2004-03-08 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		10400	mg/L	1	5.00

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A
QC Batch: 8121 Date Analyzed: 2004-03-08 Analyzed By: JG
Prep Batch: 7252 Date Prepared: 2004-03-08 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		9090	mg/L	1	5.00

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A
QC Batch: 8308 Date Analyzed: 2004-03-12 Analyzed By: JG
Prep Batch: 7402 Date Prepared: 2004-03-12 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		8260	mg/L	1	5.00

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A
QC Batch: 8308 Date Analyzed: 2004-03-12 Analyzed By: JG
Prep Batch: 7402 Date Prepared: 2004-03-12 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		15900	mg/L	50	5.00

Method Blank (1) QC Batch: 8121

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Method Blank (1) QC Batch: 8308

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Duplicate (2) QC Batch: 8121

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	2370	2370	mg/L	1	0	11
Total Dissolved Solids	2370	8020	mg/L	1	0	11

Duplicate (1) QC Batch: 8308

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	3500	3480	mg/L	1	0	11

Standard (ICV-1) QC Batch: 8121

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	965	96	92 - 107	2004-03-08

Standard (CCV-1) QC Batch: 8121

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	970	97	92 - 107	2004-03-08

Standard (CCV-2) QC Batch: 8121

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	922	92	92 - 107	2004-03-08

Standard (ICV-1) QC Batch: 8308

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	994	99	92 - 107	2004-03-12

Standard (CCV-1) QC Batch: 8308

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	995	100	92 - 107	2004-03-12

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	8084	Date Analyzed:	2004-03-09	Analyzed By:	MW
Prep Batch:	7214	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		5.04	mg/L	1	4.00

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	8084	Date Analyzed:	2004-03-09	Analyzed By:	MW
Prep Batch:	7214	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		5.88	mg/L	1	4.00

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	8084	Date Analyzed:	2004-03-09	Analyzed By:	MW
Prep Batch:	7214	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	8084	Date Analyzed:	2004-03-09	Analyzed By:	MW
Prep Batch:	7214	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	8084	Date Analyzed:	2004-03-09	Analyzed By:	MW
Prep Batch:	7214	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		4.48	mg/L	1	4.00

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	8084	Date Analyzed:	2004-03-09	Analyzed By:	MW
Prep Batch:	7214	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		5.04	mg/L	1	4.00

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	8084	Date Analyzed:	2004-03-09	Analyzed By:	MW
Prep Batch:	7214	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	8084	Date Analyzed:	2004-03-09	Analyzed By:	MW
Prep Batch:	7214	Date Prepared:	2004-03-08	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	8181	Date Analyzed:	2004-03-12	Analyzed By:	MW
Prep Batch:	7301	Date Prepared:	2004-03-11	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	8181	Date Analyzed:	2004-03-12	Analyzed By:	MW

Prep Batch: 7301 Date Prepared: 2004-03-11 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A
QC Batch: 8181 Date Analyzed: 2004-03-12 Analyzed By: MW
Prep Batch: 7301 Date Prepared: 2004-03-11 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A
QC Batch: 8181 Date Analyzed: 2004-03-12 Analyzed By: MW
Prep Batch: 7301 Date Prepared: 2004-03-11 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A
QC Batch: 8181 Date Analyzed: 2004-03-12 Analyzed By: MW
Prep Batch: 7301 Date Prepared: 2004-03-11 Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Method Blank (1) QC Batch: 8084

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	4

Method Blank (1) QC Batch: 8181

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	4

Laboratory Control Spike (LCS-1) QC Batch: 8084

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N [1]	26.0	40.0	mg/L	1	50.0	<5.05	52	42	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8181

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	38.9	35.8	mg/L	1	50.0	<5.05	78	8	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8084

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	48.2	50.4	mg/L	1	50.0	<5.05	96	4	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8181

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	45.9	43.4	mg/L	1	50.0	<5.05	92	6	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 8084

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.65	93	85 - 115	2004-03-09

Standard (CCV-1) QC Batch: 8084

[1]LCS problems - lid popped off during digestion. All other controls are within limits.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	5.32	106	85 - 115	2004-03-09

Standard (ICV-1) QC Batch: 8181

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.82	96	85 - 115	2004-03-12

Standard (CCV-1) QC Batch: 8181

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.82	96	85 - 115	2004-03-12

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	8135	Date Analyzed:	2004-03-10	Analyzed By:	RC
Prep Batch:	7261	Date Prepared:	2004-03-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		13.9	mg/L	1	1.00

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	8135	Date Analyzed:	2004-03-10	Analyzed By:	RC
Prep Batch:	7261	Date Prepared:	2004-03-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		14.6	mg/L	1	1.00

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	8135	Date Analyzed:	2004-03-10	Analyzed By:	RC
Prep Batch:	7261	Date Prepared:	2004-03-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		2.81	mg/L	1	1.00

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	8135	Date Analyzed:	2004-03-10	Analyzed By:	RC
Prep Batch:	7261	Date Prepared:	2004-03-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		32.2	mg/L	1	1.00

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	8135	Date Analyzed:	2004-03-10	Analyzed By:	RC
Prep Batch:	7261	Date Prepared:	2004-03-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		27.6	mg/L	1	1.00

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	8135	Date Analyzed:	2004-03-10	Analyzed By:	RC
Prep Batch:	7261	Date Prepared:	2004-03-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		29.6	mg/L	1	1.00

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	8135	Date Analyzed:	2004-03-10	Analyzed By:	RC
Prep Batch:	7261	Date Prepared:	2004-03-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		31.6	mg/L	1	1.00

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	8135	Date Analyzed:	2004-03-10	Analyzed By:	RC
Prep Batch:	7261	Date Prepared:	2004-03-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		2.15	mg/L	1	1.00

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	8256	Date Analyzed:	2004-03-16	Analyzed By:	RC
Prep Batch:	7362	Date Prepared:	2004-03-16	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		5.42	mg/L	1	1.00

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	8256	Date Analyzed:	2004-03-16	Analyzed By:	RC

Prep Batch: 7362 Date Prepared: 2004-03-16 Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		20.7	mg/L	1	1.00

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis: TOC Analytical Method: E 415.1 Prep Method: N/A
QC Batch: 8256 Date Analyzed: 2004-03-16 Analyzed By: RC
Prep Batch: 7362 Date Prepared: 2004-03-16 Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		41.6	mg/L	1	1.00

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis: TOC Analytical Method: E 415.1 Prep Method: N/A
QC Batch: 8256 Date Analyzed: 2004-03-16 Analyzed By: RC
Prep Batch: 7362 Date Prepared: 2004-03-16 Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		4.37	mg/L	1	1.00

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis: TOC Analytical Method: E 415.1 Prep Method: N/A
QC Batch: 8256 Date Analyzed: 2004-03-16 Analyzed By: RC
Prep Batch: 7362 Date Prepared: 2004-03-16 Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		2.91	mg/L	1	1.00

Method Blank (1) QC Batch: 8135

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Method Blank (1) QC Batch: 8256

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 8135

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	4.90	4.84	mg/L	1	5.00	<0.382	98	1	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8256

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	4.77	4.79	mg/L	1	5.00	<0.382	95	0	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8135

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	9.02	8.77	mg/L	1	5.00	2.15	137	3	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8256

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	12.7	8.65	mg/L	1	5.00	2.91	196	38	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 8135

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.14	103	85 - 115	2004-03-10

Standard (CCV-1) QC Batch: 8135

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.26	105	85 - 115	2004-03-10

Standard (ICV-1) QC Batch: 8256

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.92	98	85 - 115	2004-03-16

Standard (CCV-1) QC Batch: 8256

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.16	103	85 - 115	2004-03-16

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8134	Date Analyzed:	2004-03-11	Analyzed By:	RR
Prep Batch:	7221	Date Prepared:	2004-03-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		0.172	mg/L	1	0.0100
Total Boron		7.58	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.00500	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		0.0210	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		0.0130	mg/L	1	0.0125
Total Iron		0.302	mg/L	1	0.0500
Total Manganese		0.274	mg/L	1	0.0250
Total Molybdenum		0.657	mg/L	1	0.0500
Total Nickel		0.0510	mg/L	1	0.0250
Total Phosphorous		0.125	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.0580	mg/L	1	0.0500
Total Silica		39.4	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		3.66	mg/L	10	0.00500
Total Vanadium		0.0740	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8134	Date Analyzed:	2004-03-11	Analyzed By:	RR
Prep Batch:	7221	Date Prepared:	2004-03-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		0.359	mg/L	1	0.0100
Total Boron		8.73	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.00500	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		0.0360	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		0.0150	mg/L	1	0.0125
Total Iron		0.276	mg/L	1	0.0500
Total Manganese		0.414	mg/L	1	0.0250

continued . . .

sample 28647 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Molybdenum		0.852	mg/L	1	0.0500
Total Nickel		0.0810	mg/L	1	0.0250
Total Phosphorous		0.144	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		42.9	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		3.57	mg/L	10	0.00500
Total Vanadium		0.162	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8134	Date Analyzed:	2004-03-11	Analyzed By:	RR
Prep Batch:	7221	Date Prepared:	2004-03-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.125	mg/L	1	0.100
Total Arsenic		0.0460	mg/L	1	0.0100
Total Boron		1.78	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.00500	mg/L	1	0.00250
Total Cadmium		0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		5.89	mg/L	10	0.0100
Total Copper		0.0300	mg/L	1	0.0125
Total Iron		10.8	mg/L	10	0.0500
Total Manganese		0.120	mg/L	1	0.0250
Total Molybdenum		0.0640	mg/L	1	0.0500
Total Nickel		0.468	mg/L	1	0.0250
Total Phosphorous		0.0750	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.121	mg/L	1	0.0500
Total Silica		49.1	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		10.4	mg/L	1	0.00500
Total Vanadium		0.105	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8134	Date Analyzed:	2004-03-11	Analyzed By:	RR
Prep Batch:	7221	Date Prepared:	2004-03-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		6.47	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		<0.0500	mg/L	1	0.0500
Total Manganese		0.114	mg/L	1	0.0250
Total Molybdenum		0.137	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		0.143	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		34.8	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		4.80	mg/L	10	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8134	Date Analyzed:	2004-03-11	Analyzed By:	RR
Prep Batch:	7221	Date Prepared:	2004-03-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.112	mg/L	1	0.100
Total Arsenic		0.119	mg/L	1	0.0100
Total Boron		8.24	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.00500	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		0.0350	mg/L	1	0.0200
Total Chromium		0.0700	mg/L	1	0.0100
Total Copper		0.0280	mg/L	1	0.0125
Total Iron		2.54	mg/L	1	0.0500
Total Manganese		0.933	mg/L	1	0.0250
Total Molybdenum		0.0850	mg/L	1	0.0500
Total Nickel		0.109	mg/L	1	0.0250
Total Phosphorous		0.101	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		39.2	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		4.61	mg/L	10	0.00500

continued . . .

sample 28653 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		0.0260	mg/L	1	0.0250

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8134	Date Analyzed:	2004-03-11	Analyzed By:	RR
Prep Batch:	7221	Date Prepared:	2004-03-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.150	mg/L	1	0.100
Total Arsenic		0.0220	mg/L	1	0.0100
Total Boron		9.18	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.00500	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		0.0340	mg/L	1	0.0100
Total Copper		0.0230	mg/L	1	0.0125
Total Iron		6.05	mg/L	10	0.0500
Total Manganese		0.262	mg/L	1	0.0250
Total Molybdenum		0.0540	mg/L	1	0.0500
Total Nickel		0.0740	mg/L	1	0.0250
Total Phosphorous		0.0870	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		52.0	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		3.72	mg/L	10	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		0.0250	mg/L	1	0.0250

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8134	Date Analyzed:	2004-03-11	Analyzed By:	RR
Prep Batch:	7221	Date Prepared:	2004-03-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		0.0220	mg/L	1	0.0100
Total Boron		9.21	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.00500	mg/L	1	0.00250

continued . . .

sample 28657 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		0.0230	mg/L	1	0.0100
Total Copper		0.0180	mg/L	1	0.0125
Total Iron		6.00	mg/L	10	0.0500
Total Manganese		0.288	mg/L	1	0.0250
Total Molybdenum		0.0530	mg/L	1	0.0500
Total Nickel		0.0550	mg/L	1	0.0250
Total Phosphorous		0.0820	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		50.2	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		3.98	mg/L	10	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8134	Date Analyzed:	2004-03-11	Analyzed By:	RR
Prep Batch:	7221	Date Prepared:	2004-03-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.301	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		1.96	mg/L	1	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		0.00500	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		0.0210	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		0.211	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.152	mg/L	1	0.0500
Total Nickel		0.243	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.0840	mg/L	1	0.0500
Total Silica		32.0	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		10.8	mg/L	10	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8190	Date Analyzed:	2004-03-15	Analyzed By:	RR
Prep Batch:	7281	Date Prepared:	2004-03-11	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		4.65	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		1.20	mg/L	1	0.0500
Total Manganese		0.202	mg/L	1	0.0250
Total Molybdenum		0.106	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		44.2	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		6.24	mg/L	10	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8190	Date Analyzed:	2004-03-15	Analyzed By:	RR
Prep Batch:	7281	Date Prepared:	2004-03-11	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		49.6	mg/L	10	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		8.51	mg/L	10	0.00500
Total Barium		0.397	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		0.00500	mg/L	1	0.00500
Total Cobalt		0.0580	mg/L	1	0.0200
Total Chromium		0.428	mg/L	1	0.0100
Total Copper		0.0750	mg/L	1	0.0125
Total Iron		63.1	mg/L	10	0.0500
Total Manganese		0.610	mg/L	1	0.0250
Total Molybdenum		0.471	mg/L	1	0.0500
Total Nickel		0.115	mg/L	1	0.0250
Total Phosphorous		1.30	mg/L	1	0.0500

continued . . .

sample 28873 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Lead		0.0390	mg/L	1	0.0100
Total Selenium		0.0570	mg/L	1	0.0500
Total Silica		71.2	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		5.00	mg/L	10	0.00500
Total Vanadium		0.110	mg/L	1	0.0250
Total Zinc		0.278	mg/L	1	0.0250

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8190	Date Analyzed:	2004-03-15	Analyzed By:	RR
Prep Batch:	7281	Date Prepared:	2004-03-11	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		0.0610	mg/L	1	0.0100
Total Boron		8.84	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		0.0420	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		0.0180	mg/L	1	0.0125
Total Iron		0.570	mg/L	1	0.0500
Total Manganese		0.678	mg/L	1	0.0250
Total Molybdenum		0.106	mg/L	1	0.0500
Total Nickel		0.0980	mg/L	1	0.0250
Total Phosphorous		0.0520	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		45.3	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		3.44	mg/L	10	0.00500
Total Vanadium		0.0390	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8190	Date Analyzed:	2004-03-15	Analyzed By:	RR
Prep Batch:	7281	Date Prepared:	2004-03-11	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125

continued . . .

sample 28933 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		5.98	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		0.179	mg/L	1	0.0500
Total Manganese		0.452	mg/L	1	0.0250
Total Molybdenum		0.329	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		36.8	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		5.08	mg/L	1	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	8190	Date Analyzed:	2004-03-15	Analyzed By:	RR
Prep Batch:	7281	Date Prepared:	2004-03-11	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		3.00	mg/L	10	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		0.373	mg/L	1	0.0100
Total Copper		0.0160	mg/L	1	0.0125
Total Iron		5.75	mg/L	10	0.0500
Total Manganese		0.186	mg/L	1	0.0250
Total Molybdenum		0.313	mg/L	1	0.0500
Total Nickel		1.13	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.251	mg/L	1	0.0500
Total Silica		14.2	mg/L	10	0.0500
Total Tin		<0.0250	mg/L	1	0.0250

continued . . .

sample 28935 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Strontium		8.25	mg/L	10	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Method Blank (1) QC Batch: 8134

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.100	mg/L	0.1
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00500	mg/L	0.005
Total Cobalt		<0.0200	mg/L	0.02
Total Chromium		<0.0100	mg/L	0.01
Total Copper		<0.0125	mg/L	0.0125
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0250	mg/L	0.025
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0500	mg/L	0.05
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.00500	mg/L	0.005
Total Vanadium		<0.0250	mg/L	0.025
Total Zinc		<0.0250	mg/L	0.025

Method Blank (1) QC Batch: 8190

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.100	mg/L	0.1
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00500	mg/L	0.005
Total Cobalt		<0.0200	mg/L	0.02
Total Chromium		<0.0100	mg/L	0.01
Total Copper		<0.0125	mg/L	0.0125
Total Iron		<0.0500	mg/L	0.05

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0250	mg/L	0.025
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0500	mg/L	0.05
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.00500	mg/L	0.005
Total Vanadium		<0.0250	mg/L	0.025
Total Zinc		<0.0250	mg/L	0.025

Laboratory Control Spike (LCS-1) QC Batch: 8134

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.131	0.130	mg/L	1	0.125	<0.000199	105	1	85 - 115	20
Total Aluminum		1.01	1.00	mg/L	1	1.00	<0.00984	101	1	85 - 115	20
Total Arsenic		0.494	0.488	mg/L	1	0.500	<0.00860	99	1	85 - 115	20
Total Boron		0.0500	0.0490	mg/L	1	0.0500	<0.00366	100	2	85 - 115	20
Total Barium		1.03	1.03	mg/L	1	1.00	<0.000984	103	0	85 - 115	20
Total Beryllium		0.0240	0.0240	mg/L	1	0.0250	<0.000532	96	0	85 - 115	20
Total Cadmium		0.248	0.246	mg/L	1	0.250	<0.000577	99	1	85 - 115	20
Total Cobalt		0.256	0.253	mg/L	1	0.250	<0.000630	102	1	85 - 115	20
Total Chromium		0.106	0.104	mg/L	1	0.100	<0.000437	106	2	85 - 115	20
Total Copper		0.128	0.127	mg/L	1	0.125	<0.00164	102	1	85 - 115	20
Total Iron		0.507	0.513	mg/L	1	0.500	<0.00281	101	1	85 - 115	20
Total Manganese		0.253	0.254	mg/L	1	0.250	<0.00296	101	0	85 - 115	20
Total Molybdenum		0.521	0.517	mg/L	1	0.500	<0.00118	104	1	85 - 115	20
Total Nickel		0.251	0.249	mg/L	1	0.250	<0.00126	100	1	85 - 115	20
Total Phosphorous		0.520	0.512	mg/L	1	0.500	<0.00459	104	2	85 - 115	20
Total Lead		0.503	0.508	mg/L	1	0.500	<0.00310	101	1	85 - 115	20
Total Selenium		0.434	0.428	mg/L	1	0.500	<0.00370	87	1	85 - 115	20
Total Silica	[1,2]	1.03	1.06	mg/L	1	1.00	<0.00632	103	3	85 - 115	20
Total Tin	[3,4]	0.307	0.305	mg/L	1	0.300	<0.00238	102	1	85 - 115	20
Total Strontium		0.0520	0.0520	mg/L	1	0.0500	<0.000457	104	0	85 - 115	20
Total Vanadium		0.265	0.258	mg/L	1	0.250	<0.000371	106	3	85 - 115	20
Total Zinc		0.243	0.242	mg/L	1	0.250	<0.00151	97	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 8190

[1]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[2]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[3]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[4]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.126	0.126	mg/L	1	0.125	<0.000199	101	0	85 - 115	20
Total Aluminum		0.942	0.942	mg/L	1	1.00	<0.00984	94	0	85 - 115	20
Total Arsenic		0.476	0.474	mg/L	1	0.500	<0.00860	95	0	85 - 115	20
Total Boron		0.0430	0.0430	mg/L	1	0.0500	<0.00366	86	0	85 - 115	20
Total Barium		1.01	1.01	mg/L	1	1.00	<0.000984	101	0	85 - 115	20
Total Beryllium		0.0230	0.0230	mg/L	1	0.0250	<0.000532	92	0	85 - 115	20
Total Cadmium		0.238	0.238	mg/L	1	0.250	<0.000577	95	0	85 - 115	20
Total Cobalt		0.249	0.249	mg/L	1	0.250	<0.000630	100	0	85 - 115	20
Total Chromium		0.101	0.101	mg/L	1	0.100	<0.000437	101	0	85 - 115	20
Total Copper		0.122	0.122	mg/L	1	0.125	<0.00164	98	0	85 - 115	20
Total Iron		0.492	0.491	mg/L	1	0.500	<0.00281	98	0	85 - 115	20
Total Manganese		0.244	0.245	mg/L	1	0.250	<0.00296	98	0	85 - 115	20
Total Molybdenum		0.516	0.517	mg/L	1	0.500	<0.00118	103	0	85 - 115	20
Total Nickel		0.239	0.239	mg/L	1	0.250	<0.00126	96	0	85 - 115	20
Total Phosphorous		0.485	0.479	mg/L	1	0.500	<0.00459	97	1	85 - 115	20
Total Lead		0.495	0.497	mg/L	1	0.500	<0.00310	99	0	85 - 115	20
Total Selenium		0.426	0.424	mg/L	1	0.500	<0.00370	85	0	85 - 115	20
Total Silica	[5][6]	1.01	1.00	mg/L	1	1.00	<0.00632	101	1	85 - 115	20
Total Tin	[7][8]	0.300	0.301	mg/L	1	0.300	<0.00238	100	0	85 - 115	20
Total Strontium		0.0470	0.0460	mg/L	1	0.0500	<0.000457	94	2	85 - 115	20
Total Vanadium		0.252	0.252	mg/L	1	0.250	<0.000371	101	0	85 - 115	20
Total Zinc		0.237	0.237	mg/L	1	0.250	<0.00151	95	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8134

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.130	0.129	mg/L	1	0.125	<0.000199	104	1	75 - 125	20
Total Aluminum		1.16	1.15	mg/L	1	1.00	<0.00984	116	1	75 - 125	20
Total Arsenic		0.430	0.428	mg/L	1	0.500	<0.00860	86	0	75 - 125	20
Total Boron		7.07	6.98	mg/L	10	0.0500	6.47	120	1	75 - 125	20
Total Barium		0.916	0.910	mg/L	1	1.00	<0.000984	92	1	75 - 125	20
Total Beryllium		0.0250	0.0250	mg/L	1	0.0250	<0.000532	100	0	75 - 125	20
Total Cadmium		0.196	0.194	mg/L	1	0.250	<0.000577	78	1	75 - 125	20
Total Cobalt		0.203	0.201	mg/L	1	0.250	<0.000630	81	1	75 - 125	20
Total Chromium		0.0910	0.0900	mg/L	1	0.100	<0.000437	91	1	75 - 125	20
Total Copper		0.134	0.134	mg/L	1	0.125	<0.00164	107	0	75 - 125	20
Total Iron		0.442	0.451	mg/L	1	0.500	<0.00281	88	2	75 - 125	20
Total Manganese		0.316	0.314	mg/L	1	0.250	0.114	81	1	75 - 125	20
Total Molybdenum		0.563	0.559	mg/L	1	0.500	0.137	85	1	75 - 125	20
Total Nickel		0.210	0.208	mg/L	1	0.250	<0.00126	84	1	75 - 125	20
Total Phosphorous		0.614	0.610	mg/L	1	0.500	0.143	94	1	75 - 125	20
Total Lead		0.388	0.386	mg/L	1	0.500	<0.00310	78	0	75 - 125	20
Total Selenium	[9][10]	0.262	0.259	mg/L	1	0.500	<0.00370	52	1	75 - 125	20

continued . . .

[5]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[6]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[7]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[8]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[9]Poor MS recovery due to matrix effect. LCS demonstrates process under control.
[10]Poor MS recovery due to matrix effect. LCS demonstrates process under control.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silica	[11][12]	37.9	38.1	mg/L	10	0.500	34.8	62	0	75 - 125	20
Total Tin	[13][14]	0.241	0.242	mg/L	1	0.300	<0.00238	80	0	75 - 125	20
Total Strontium	[15]	5.20	5.11	mg/L	10	0.0500	4.8	80	2	75 - 125	20
Total Vanadium		0.236	0.234	mg/L	1	0.250	<0.000371	94	1	75 - 125	20
Total Zinc		0.193	0.190	mg/L	1	0.250	<0.00151	77	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 8190

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.123	0.122	mg/L	1	0.125	<0.000199	98	1	75 - 125	20
Total Aluminum		1.07	1.06	mg/L	1	1.00	<0.00984	107	1	75 - 125	20
Total Arsenic		0.465	0.453	mg/L	1	0.500	<0.00860	93	3	75 - 125	20
Total Boron	[16][17]	4.14	4.10	mg/L	10	0.0500	4.14	0	1	75 - 125	20
Total Barium		0.981	0.990	mg/L	1	1.00	0.022	96	1	75 - 125	20
Total Beryllium		0.0190	0.0190	mg/L	1	0.0250	<0.000532	76	0	75 - 125	20
Total Cadmium		0.203	0.206	mg/L	1	0.250	<0.000577	81	1	75 - 125	20
Total Cobalt		0.216	0.221	mg/L	1	0.250	<0.000630	86	2	75 - 125	20
Total Chromium		0.0820	0.0820	mg/L	1	0.100	<0.000437	82	0	75 - 125	20
Total Copper		0.119	0.118	mg/L	1	0.125	0.002	94	1	75 - 125	20
Total Iron		1.74	1.77	mg/L	1	0.500	1.2	108	2	75 - 125	20
Total Manganese		0.445	0.451	mg/L	1	0.250	0.202	97	1	75 - 125	20
Total Molybdenum		0.613	0.626	mg/L	1	0.500	0.106	101	2	75 - 125	20
Total Nickel		0.203	0.202	mg/L	1	0.250	<0.00126	81	0	75 - 125	20
Total Phosphorous		0.523	0.522	mg/L	1	0.500	0.012	102	0	75 - 125	20
Total Lead		0.431	0.434	mg/L	1	0.500	<0.00310	86	1	75 - 125	20
Total Selenium		0.557	0.571	mg/L	1	0.500	0.026	106	2	75 - 125	20
Total Silica	[18][19]	40.2	40.2	mg/L	10	0.500	40.2	0	0	75 - 125	20
Total Tin	[20][21]	0.225	0.224	mg/L	1	0.300	<0.00238	75	0	75 - 125	20
Total Strontium	[22][23]	5.69	5.75	mg/L	10	0.0500	5.69	0	1	75 - 125	20
Total Vanadium		0.260	0.263	mg/L	1	0.250	0.013	99	1	75 - 125	20
Total Zinc		0.193	0.188	mg/L	1	0.250	<0.00151	77	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 8134

[11] MS recovery invalid due to required dilution. LCS demonstrates process under control.
[12] MS recovery invalid due to required dilution. LCS demonstrates process under control
[13] Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[14] Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[15] MS recovery invalid due to required dilution. LCS demonstrates process under control
[16] MS recovery invalid due to required dilution. LCS demonstrates process under control.
[17] MS recovery invalid due to required dilution. LCS demonstrates process under control.
[18] MS recovery invalid due to required dilution. LCS demonstrates process under control.
[19] MS recovery invalid due to required dilution. LCS demonstrates process under control.
[20] Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[21] Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[22] MS recovery invalid due to required dilution. LCS demonstrates process under control.
[23] MS recovery invalid due to required dilution. LCS demonstrates process under control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.128	102	90 - 110	2004-03-11
Total Aluminum		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Boron		mg/L	1.00	1.05	105	90 - 110	2004-03-11
Total Barium		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Cadmium		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Cobalt		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Chromium		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Copper		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Iron		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Manganese		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Nickel		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Phosphorous		mg/L	5.00	5.06	101	90 - 110	2004-03-11
Total Lead		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Selenium		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Silica		mg/L	5.00	5.08	102	90 - 110	2004-03-11
Total Tin		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Strontium		mg/L	1.00	1.04	104	90 - 110	2004-03-11
Total Vanadium		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Zinc		mg/L	1.00	1.01	101	90 - 110	2004-03-11

Standard (CCV-1) QC Batch: 8134

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.130	104	90 - 110	2004-03-11
Total Aluminum		mg/L	1.00	1.05	105	90 - 110	2004-03-11
Total Arsenic		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Boron		mg/L	1.00	1.09	109	90 - 110	2004-03-11
Total Barium		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Beryllium		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Cadmium		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Cobalt		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Chromium		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Copper		mg/L	1.00	1.04	104	90 - 110	2004-03-11
Total Iron		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Manganese		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-03-11
Total Nickel		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Phosphorous		mg/L	5.00	5.08	102	90 - 110	2004-03-11
Total Lead		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Selenium		mg/L	1.00	1.03	103	90 - 110	2004-03-11
Total Silica		mg/L	5.00	5.21	104	90 - 110	2004-03-11
Total Tin		mg/L	1.00	1.03	103	90 - 110	2004-03-11
Total Strontium		mg/L	1.00	1.06	106	90 - 110	2004-03-11
Total Vanadium		mg/L	1.00	1.02	102	90 - 110	2004-03-11
Total Zinc		mg/L	1.00	0.998	100	90 - 110	2004-03-11

Standard (ICV-1) QC Batch: 8190

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.126	101	90 - 110	2004-03-15
Total Aluminum		mg/L	1.00	0.994	99	90 - 110	2004-03-15
Total Arsenic		mg/L	1.00	1.00	100	90 - 110	2004-03-15
Total Boron		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Barium		mg/L	1.00	1.00	100	90 - 110	2004-03-15
Total Beryllium		mg/L	1.00	0.996	100	90 - 110	2004-03-15
Total Cadmium		mg/L	1.00	1.00	100	90 - 110	2004-03-15
Total Cobalt		mg/L	1.00	1.00	100	90 - 110	2004-03-15
Total Chromium		mg/L	1.00	1.00	100	90 - 110	2004-03-15
Total Copper		mg/L	1.00	1.00	100	90 - 110	2004-03-15
Total Iron		mg/L	1.00	1.00	100	90 - 110	2004-03-15
Total Manganese		mg/L	1.00	1.01	101	90 - 110	2004-03-15
Total Molybdenum		mg/L	1.00	1.00	100	90 - 110	2004-03-15
Total Nickel		mg/L	1.00	1.00	100	90 - 110	2004-03-15
Total Phosphorous		mg/L	5.00	5.00	100	90 - 110	2004-03-15
Total Lead		mg/L	1.00	1.00	100	90 - 110	2004-03-15
Total Selenium		mg/L	1.00	1.01	101	90 - 110	2004-03-15
Total Silica		mg/L	5.00	4.99	100	90 - 110	2004-03-15
Total Tin		mg/L	1.00	1.01	101	90 - 110	2004-03-15
Total Strontium		mg/L	1.00	1.01	101	90 - 110	2004-03-15
Total Vanadium		mg/L	1.00	0.999	100	90 - 110	2004-03-15
Total Zinc		mg/L	1.00	1.01	101	90 - 110	2004-03-15

Standard (CCV-1) QC Batch: 8190

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.129	103	90 - 110	2004-03-15
Total Aluminum		mg/L	1.00	1.04	104	90 - 110	2004-03-15
Total Arsenic		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Boron		mg/L	1.00	1.04	104	90 - 110	2004-03-15
Total Barium		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-03-15
Total Cadmium		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Cobalt		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Chromium		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Copper		mg/L	1.00	1.04	104	90 - 110	2004-03-15
Total Iron		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Manganese		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Molybdenum		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Nickel		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Phosphorous		mg/L	5.00	5.09	102	90 - 110	2004-03-15
Total Lead		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Selenium		mg/L	1.00	1.03	103	90 - 110	2004-03-15
Total Silica		mg/L	5.00	5.18	104	90 - 110	2004-03-15
Total Tin		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Strontium		mg/L	1.00	1.02	102	90 - 110	2004-03-15
Total Vanadium		mg/L	1.00	1.02	102	90 - 110	2004-03-15

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		mg/L	1.00	1.01	101	90 - 110	2004-03-15

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	8107	Date Analyzed:	2004-03-10	Analyzed By:	BP
Prep Batch:	7236	Date Prepared:	2004-03-10	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		8.66	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.2	mg/L	0.1	150	94	81.8 - 161

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	8107	Date Analyzed:	2004-03-10	Analyzed By:	BP
Prep Batch:	7236	Date Prepared:	2004-03-10	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		8.34	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.5	mg/L	0.1	150	96	81.8 - 161

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	8107	Date Analyzed:	2004-03-10	Analyzed By:	BP
Prep Batch:	7236	Date Prepared:	2004-03-10	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.6	mg/L	0.1	150	97	81.8 - 161

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	8123	Date Analyzed:	2004-03-10	Analyzed By:	BP
Prep Batch:	7254	Date Prepared:	2004-03-10	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		285	mg/L	0.2	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[1]	15.6	mg/L	0.2	75.0	104	81.8 - 161

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	8123	Date Analyzed:	2004-03-10	Analyzed By:	BP
Prep Batch:	7254	Date Prepared:	2004-03-10	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		359	mg/L	0.2	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[2]	15.3	mg/L	0.2	75.0	102	81.8 - 161

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	8123	Date Analyzed:	2004-03-10	Analyzed By:	BP
Prep Batch:	7254	Date Prepared:	2004-03-10	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		24.7	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.6	mg/L	0.1	150	97	81.8 - 161

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	8107	Date Analyzed:	2004-03-10	Analyzed By:	BP
Prep Batch:	7236	Date Prepared:	2004-03-10	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		48.1	mg/L	0.1	50.0

[1]Changed spike amount from 150 to 75 due to post prep dilution.
[2]Changed spike amount from 150 to 75 due to post prep dilution.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.2	mg/L	0.1	150	95	81.8 - 161

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	8107	Date Analyzed:	2004-03-10	Analyzed By:	BP
Prep Batch:	7236	Date Prepared:	2004-03-10	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.3	mg/L	0.1	150	88	81.8 - 161

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	8107	Date Analyzed:	2004-03-10	Analyzed By:	BP
Prep Batch:	7236	Date Prepared:	2004-03-10	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.1	mg/L	0.1	150	87	81.8 - 161

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	8107	Date Analyzed:	2004-03-10	Analyzed By:	BP
Prep Batch:	7236	Date Prepared:	2004-03-10	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		66.0	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.1	mg/L	0.1	150	94	81.8 - 161

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	8107	Date Analyzed:	2004-03-10	Analyzed By:	BP

Prep Batch: 7236 Date Prepared: 2004-03-10 Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.2	mg/L	0.1	150	88	81.8 - 161

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 8123 Date Analyzed: 2004-03-10 Analyzed By: BP
Prep Batch: 7254 Date Prepared: 2004-03-10 Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.2	mg/L	0.1	150	88	81.8 - 161

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 8123 Date Analyzed: 2004-03-10 Analyzed By: BP
Prep Batch: 7254 Date Prepared: 2004-03-10 Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.4	mg/L	0.1	150	89	81.8 - 161

Method Blank (1) QC Batch: 8107

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.2	mg/L	0.1	150	102	81.8 - 161

Method Blank (1) QC Batch: 8123

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.6	mg/L	0.1	150	97	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 8107

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	23.1	22.7	mg/L	0.1	250	<0.538	92	2	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	15.0	14.8	mg/L	0.1	150	100	98	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 8123

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	23.9	23.9	mg/L	0.1	250	<0.538	96	0	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	14.9	14.7	mg/L	0.1	150	99	98	81.8 - 161

Standard (ICV-1) QC Batch: 8107

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	229	92	68 - 140	2004-03-10

Standard (CCV-1) QC Batch: 8107

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	227	91	68 - 140	2004-03-10

Standard (CCV-2) QC Batch: 8107

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	232	93	68 - 140	2004-03-10

Standard (ICV-1) QC Batch: 8123

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	239	96	68 - 140	2004-03-10

Standard (CCV-1) QC Batch: 8123

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	222	89	68 - 140	2004-03-10

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08

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 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	8128	Date Analyzed:	2004-03-09	Analyzed By:	MS
Prep Batch:	7258	Date Prepared:	2004-03-09	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.710	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0927	mg/L	1	0.100	93	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0962	mg/L	1	0.100	96	70 - 130

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	8128	Date Analyzed:	2004-03-09	Analyzed By:	MS
Prep Batch:	7258	Date Prepared:	2004-03-09	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.436	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0917	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)		0.107	mg/L	1	0.100	107	70 - 130

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	8078	Date Analyzed:	2004-03-08	Analyzed By:	MS
Prep Batch:	7211	Date Prepared:	2004-03-08	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0847	mg/L	1	0.100	85	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0805	mg/L	1	0.100	80	70 - 130

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	8128	Date Analyzed:	2004-03-09	Analyzed By:	MS

Prep Batch: 7258 Date Prepared: 2004-03-09 Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.956	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0755	mg/L	1	0.100	76	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0910	mg/L	1	0.100	91	70 - 130

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
QC Batch: 8128 Date Analyzed: 2004-03-09 Analyzed By: MS
Prep Batch: 7258 Date Prepared: 2004-03-09 Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.630	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0849	mg/L	1	0.100	85	70 - 130
4-Bromofluorobenzene (4-BFB)		0.106	mg/L	1	0.100	106	70 - 130

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
QC Batch: 8128 Date Analyzed: 2004-03-09 Analyzed By: MS
Prep Batch: 7258 Date Prepared: 2004-03-09 Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		1.41	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0859	mg/L	1	0.100	86	70 - 130
4-Bromofluorobenzene (4-BFB)		0.112	mg/L	1	0.100	112	70 - 130

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
QC Batch: 8128 Date Analyzed: 2004-03-09 Analyzed By: MS
Prep Batch: 7258 Date Prepared: 2004-03-09 Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.392	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[1]	0.0366	mg/L	1	0.100	37	70 - 130
4-Bromofluorobenzene (4-BFB)	[2]	0.0556	mg/L	1	0.100	56	70 - 130

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	8078	Date Analyzed:	2004-03-08	Analyzed By:	MS
Prep Batch:	7211	Date Prepared:	2004-03-08	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0779	mg/L	1	0.100	78	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0765	mg/L	1	0.100	76	70 - 130

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	8128	Date Analyzed:	2004-03-09	Analyzed By:	MS
Prep Batch:	7258	Date Prepared:	2004-03-09	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[3]	0.0553	mg/L	1	0.100	55	70 - 130
4-Bromofluorobenzene (4-BFB)	[4]	0.0668	mg/L	1	0.100	67	70 - 130

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	8212	Date Analyzed:	2004-03-12	Analyzed By:	MS
Prep Batch:	7315	Date Prepared:	2004-03-09	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.299	mg/L	1	0.100

[1]Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.
[2]Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.
[3]Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.
[4]Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0774	mg/L	1	0.100	77	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0927	mg/L	1	0.100	93	70 - 130

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	8128	Date Analyzed:	2004-03-09	Analyzed By:	MS
Prep Batch:	7258	Date Prepared:	2004-03-09	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.259	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[5]	0.0671	mg/L	1	0.100	67	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0851	mg/L	1	0.100	85	70 - 130

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	8238	Date Analyzed:	2004-03-15	Analyzed By:	MT
Prep Batch:	7348	Date Prepared:	2004-03-15	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.500	mg/L	5	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.497	mg/L	5	0.100	99	70 - 130
4-Bromofluorobenzene (4-BFB)		0.518	mg/L	5	0.100	104	70 - 130

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	8212	Date Analyzed:	2004-03-12	Analyzed By:	MS
Prep Batch:	7315	Date Prepared:	2004-03-09	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0819	mg/L	1	0.100	82	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0832	mg/L	1	0.100	83	70 - 130

[5]Low TFT surrogate recovery due to matrix interference. BFB surrogate recovery shows the method to be in control.

Method Blank (1) QC Batch: 8078

Parameter	Flag	Result	Units	RL
GRO		0.206	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0909	mg/L	1	0.100	91	44.8 - 160
4-Bromofluorobenzene (4-BFB)		0.0922	mg/L	1	0.100	92	44.1 - 133

Method Blank (1) QC Batch: 8128

Parameter	Flag	Result	Units	RL
GRO		0.168	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0894	mg/L	1	0.100	89	44.8 - 160
4-Bromofluorobenzene (4-BFB)		0.0803	mg/L	1	0.100	80	44.1 - 133

Method Blank (1) QC Batch: 8212

Parameter	Flag	Result	Units	RL
GRO		0.178	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0941	mg/L	1	0.100	94	44.8 - 160
4-Bromofluorobenzene (4-BFB)		0.0857	mg/L	1	0.100	86	44.1 - 133

Method Blank (1) QC Batch: 8238

Parameter	Flag	Result	Units	RL
GRO		0.185	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0931	mg/L	1	0.100	93	44.8 - 160
4-Bromofluorobenzene (4-BFB)		0.0963	mg/L	1	0.100	96	44.1 - 133

Laboratory Control Spike (LCS-1) QC Batch: 8078

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	0.981	1.14	mg/L	1	1.00	<0.0261	98	15	68.8 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0939	0.0939	mg/L	1	0.100	94	94	53.5 - 145
4-Bromofluorobenzene (4-BFB)	0.0988	0.0998	mg/L	1	0.100	99	100	54.5 - 134

Laboratory Control Spike (LCS-1) QC Batch: 8128

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	1.12	0.942	mg/L	1	1.00	<0.0261	112	17	68.8 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0962	0.0952	mg/L	1	0.100	96	95	53.5 - 145
4-Bromofluorobenzene (4-BFB)	0.0959	0.0958	mg/L	1	0.100	96	96	54.5 - 134

Laboratory Control Spike (LCS-1) QC Batch: 8212

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	1.06	1.05	mg/L	1	1.00	<0.0261	106	1	68.8 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0983	0.0998	mg/L	1	0.100	98	100	53.5 - 145
4-Bromofluorobenzene (4-BFB)	0.100	0.101	mg/L	1	0.100	100	101	54.5 - 134

Laboratory Control Spike (LCS-1) QC Batch: 8238

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	0.919	0.962	mg/L	1	1.00	<0.0261	92	4	68.8 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0959	0.0994	mg/L	1	0.100	96	99	53.5 - 145
4-Bromofluorobenzene (4-BFB)	0.105	0.108	mg/L	1	0.100	105	108	54.5 - 134

Standard (ICV-1) QC Batch: 8078

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.15	115	85 - 115	2004-03-08

Standard (CCV-1) QC Batch: 8078

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.13	113	85 - 115	2004-03-08

Standard (ICV-1) QC Batch: 8128

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.11	111	85 - 115	2004-03-09

Standard (CCV-1) QC Batch: 8128

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.962	96	85 - 115	2004-03-09

Standard (ICV-1) QC Batch: 8212

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.06	106	85 - 115	2004-03-12

Standard (CCV-1) QC Batch: 8212

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.03	103	85 - 115	2004-03-12

Standard (ICV-1) QC Batch: 8238

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.948	95	85 - 115	2004-03-15

Standard (CCV-1) QC Batch: 8238

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.952	95	85 - 115	2004-03-15

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: March 25, 2004

Work Order: 4030421

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
28645	HLSF-0154-DRW-003-0304	water	2004-03-03	12:56	2004-03-04
28646	HLSF-0154-TB-213	water	2004-03-03	12:56	2004-03-04
28647	HLSF-0154-DRW-103-0304	water	2004-03-03	12:56	2004-03-04
28648	HLSF-0154-TB-214	water	2004-03-03	12:56	2004-03-04
28649	HLSF-0154-DRW-016-0304	water	2004-03-03	11:20	2004-03-04
28650	HLSF-0154-TB-219	water	2004-03-03	11:20	2004-03-04
28651	HLSF-0154-HCF-007-0304	water	2004-03-04	13:00	2004-03-04
28652	HLSF-0154-TB-223	water	2004-03-04	13:00	2004-03-04
28653	HLSF-0154-DRW-001-0304	water	2004-03-04	13:20	2004-03-04
28654	HLSF-0154-TB-211	water	2004-03-04	13:20	2004-03-04
28655	HLSF-0154-HCF-005-0304	water	2004-03-04	13:10	2004-03-04
28656	HLSF-0154-TB-221	water	2004-03-04	13:10	2004-03-04
28657	HLSF-0154-HCF-105-0304	water	2004-03-04	13:10	2004-03-04
28658	HLSF-0154-TB-222	water	2004-03-04	13:10	2004-03-04
28659	HLSF-0154-DRW-013-0304	water	2004-03-04	10:30	2004-03-04
28660	HLSF-0154-TB-218	water	2004-03-04	10:30	2004-03-04
28871	HLSF-0154-DRW-005-0304	water	2004-03-05	10:45	2004-03-05
28872	HLSF-0154-TB-216	water	2004-03-05	10:45	2004-03-05
28873	HLSF-0154-DRW-002-0304	water	2004-03-05	12:00	2004-03-05
28874	HLSF-0154-TB-212	water	2004-03-05	12:00	2004-03-05
28875	HLSF-0154-DRW-004-0304	water	2004-03-05	11:00	2004-03-05
28876	HLSF-0154-TB-215	water	2004-03-05	11:00	2004-03-05
28933	HLSF-0154-HCF-001-0304	water	2004-03-08	12:44	2004-03-08
28934	HLSF-0154-TB-220	water	2004-03-08	12:44	2004-03-08
28935	HLSF-0154-DRW-012-0304	water	2004-03-08	12:40	2004-03-08
28936	HLSF-0154-TB-217	water	2004-03-08	12:40	2004-03-08

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 59 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 28645 - HLSF-0154-DRW-003-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8079	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7212	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<10.0	μg/L	10	1.00
Dichlorodifluoromethane		<10.0	μg/L	10	1.00
Chloromethane (methyl chloride)		<10.0	μg/L	10	1.00
Vinyl Chloride		<10.0	μg/L	10	1.00
Bromomethane (methyl bromide)		<50.0	μg/L	10	5.00
Chloroethane		<10.0	μg/L	10	1.00
Trichlorofluoromethane		<10.0	μg/L	10	1.00
Acetone		<100	μg/L	10	10.0
Iodomethane (methyl iodide)		<50.0	μg/L	10	5.00
Carbon Disulfide		<10.0	μg/L	10	1.00
Acrylonitrile		<10.0	μg/L	10	1.00
2-Butanone (MEK)		<50.0	μg/L	10	5.00
4-Methyl-2-pentanone (MIBK)		<50.0	μg/L	10	5.00
2-Hexanone		<50.0	μg/L	10	5.00
trans 1,4-Dichloro-2-butene		<100	μg/L	10	10.0
1,1-Dichloroethene		<10.0	μg/L	10	1.00
Methylene chloride		<50.0	μg/L	10	5.00
MTBE		<10.0	μg/L	10	1.00
trans-1,2-Dichloroethene		<10.0	μg/L	10	1.00
1,1-Dichloroethane		32.7	μg/L	10	1.00
cis-1,2-Dichloroethene		<10.0	μg/L	10	1.00
2,2-Dichloropropane		<10.0	μg/L	10	1.00
1,2-Dichloroethane (EDC)		<10.0	μg/L	10	1.00
Chloroform		<10.0	μg/L	10	1.00
1,1,1-Trichloroethane		<10.0	μg/L	10	1.00
1,1-Dichloropropene		<10.0	μg/L	10	1.00
Benzene		10.5	μg/L	10	1.00
Carbon Tetrachloride		<10.0	μg/L	10	1.00
1,2-Dichloropropane		<10.0	μg/L	10	1.00
Trichloroethene (TCE)		<10.0	μg/L	10	1.00
Dibromomethane (methylene bromide)		<10.0	μg/L	10	1.00
Bromodichloromethane		<10.0	μg/L	10	1.00
2-Chloroethyl vinyl ether		<50.0	μg/L	10	5.00
cis-1,3-Dichloropropene		<10.0	μg/L	10	1.00
trans-1,3-Dichloropropene		<10.0	μg/L	10	1.00
Toluene		<10.0	μg/L	10	1.00
1,1,2-Trichloroethane		<10.0	μg/L	10	1.00
1,3-Dichloropropane		<10.0	μg/L	10	1.00
Dibromochloromethane		<10.0	μg/L	10	1.00
1,2-Dibromoethane (EDB)		<10.0	μg/L	10	1.00
Tetrachloroethene (PCE)		<10.0	μg/L	10	1.00
Chlorobenzene		<10.0	μg/L	10	1.00
1,1,1,2-Tetrachloroethane		<10.0	μg/L	10	1.00
Ethylbenzene		<10.0	μg/L	10	1.00
m,p-Xylene		<10.0	μg/L	10	1.00

continued . . .

sample 28645 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bromoform		<10.0	µg/L	10	1.00
Styrene		<10.0	µg/L	10	1.00
o-Xylene		<10.0	µg/L	10	1.00
1,1,2,2-Tetrachloroethane		<10.0	µg/L	10	1.00
2-Chlorotoluene		<10.0	µg/L	10	1.00
1,2,3-Trichloropropane		<10.0	µg/L	10	1.00
Isopropylbenzene		<10.0	µg/L	10	1.00
Bromobenzene		<10.0	µg/L	10	1.00
n-Propylbenzene		<10.0	µg/L	10	1.00
1,3,5-Trimethylbenzene		20.4	µg/L	10	1.00
tert-Butylbenzene		<10.0	µg/L	10	1.00
1,2,4-Trimethylbenzene		60.7	µg/L	10	1.00
1,4-Dichlorobenzene (para)		<10.0	µg/L	10	1.00
sec-Butylbenzene		<10.0	µg/L	10	1.00
1,3-Dichlorobenzene (meta)		<10.0	µg/L	10	1.00
p-Isopropyltoluene		<10.0	µg/L	10	1.00
4-Chlorotoluene		<10.0	µg/L	10	1.00
1,2-Dichlorobenzene (ortho)		<10.0	µg/L	10	1.00
n-Butylbenzene		<10.0	µg/L	10	1.00
1,2-Dibromo-3-chloropropane		<50.0	µg/L	10	5.00
1,2,3-Trichlorobenzene		<50.0	µg/L	10	5.00
1,2,4-Trichlorobenzene		<50.0	µg/L	10	5.00
Naphthalene		<50.0	µg/L	10	5.00
Hexachlorobutadiene		<50.0	µg/L	10	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.4	µg/L	1	50.0	101	70 - 130
Toluene-d8		49.8	µg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		45.7	µg/L	1	50.0	91	70 - 130

Sample: 28646 - HLSF-0154-TB-213

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8079	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7212	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00

continued . . .

sample 28646 continued . . .

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

continued . . .

sample 28646 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.3	μg/L	1	50.0	101	70 - 130
Toluene-d8		50.4	μg/L	1	50.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)		46.0	μg/L	1	50.0	92	70 - 130

Sample: 28647 - HLSF-0154-DRW-103-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8079	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7212	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<10.0	μg/L	10	1.00
Dichlorodifluoromethane		<10.0	μg/L	10	1.00
Chloromethane (methyl chloride)		<10.0	μg/L	10	1.00
Vinyl Chloride		<10.0	μg/L	10	1.00
Bromomethane (methyl bromide)		<50.0	μg/L	10	5.00
Chloroethane		<10.0	μg/L	10	1.00
Trichlorofluoromethane		<10.0	μg/L	10	1.00
Acetone		<100	μg/L	10	10.0
Iodomethane (methyl iodide)		<50.0	μg/L	10	5.00
Carbon Disulfide		<10.0	μg/L	10	1.00
Acrylonitrile		<10.0	μg/L	10	1.00
2-Butanone (MEK)		<50.0	μg/L	10	5.00
4-Methyl-2-pentanone (MIBK)		<50.0	μg/L	10	5.00
2-Hexanone		<50.0	μg/L	10	5.00
trans 1,4-Dichloro-2-butene		<100	μg/L	10	10.0
1,1-Dichloroethene		<10.0	μg/L	10	1.00
Methylene chloride		<50.0	μg/L	10	5.00
MTBE		<10.0	μg/L	10	1.00
trans-1,2-Dichloroethene		<10.0	μg/L	10	1.00
1,1-Dichloroethane		31.0	μg/L	10	1.00
cis-1,2-Dichloroethene		<10.0	μg/L	10	1.00
2,2-Dichloropropane		<10.0	μg/L	10	1.00
1,2-Dichloroethane (EDC)		<10.0	μg/L	10	1.00
Chloroform		<10.0	μg/L	10	1.00
1,1,1-Trichloroethane		<10.0	μg/L	10	1.00
1,1-Dichloropropene		<10.0	μg/L	10	1.00

continued . . .

sample 28647 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		10.6	μg/L	10	1.00
Carbon Tetrachloride		<10.0	μg/L	10	1.00
1,2-Dichloropropane		<10.0	μg/L	10	1.00
Trichloroethene (TCE)		<10.0	μg/L	10	1.00
Dibromomethane (methylene bromide)		<10.0	μg/L	10	1.00
Bromodichloromethane		<10.0	μg/L	10	1.00
2-Chloroethyl vinyl ether		<50.0	μg/L	10	5.00
cis-1,3-Dichloropropene		<10.0	μg/L	10	1.00
trans-1,3-Dichloropropene		<10.0	μg/L	10	1.00
Toluene		<10.0	μg/L	10	1.00
1,1,2-Trichloroethane		<10.0	μg/L	10	1.00
1,3-Dichloropropane		<10.0	μg/L	10	1.00
Dibromochloromethane		<10.0	μg/L	10	1.00
1,2-Dibromoethane (EDB)		<10.0	μg/L	10	1.00
Tetrachloroethene (PCE)		<10.0	μg/L	10	1.00
Chlorobenzene		<10.0	μg/L	10	1.00
1,1,1,2-Tetrachloroethane		<10.0	μg/L	10	1.00
Ethylbenzene		<10.0	μg/L	10	1.00
m,p-Xylene		<10.0	μg/L	10	1.00
Bromoform		<10.0	μg/L	10	1.00
Styrene		<10.0	μg/L	10	1.00
o-Xylene		<10.0	μg/L	10	1.00
1,1,2,2-Tetrachloroethane		<10.0	μg/L	10	1.00
2-Chlorotoluene		<10.0	μg/L	10	1.00
1,2,3-Trichloropropane		<10.0	μg/L	10	1.00
Isopropylbenzene		<10.0	μg/L	10	1.00
Bromobenzene		<10.0	μg/L	10	1.00
n-Propylbenzene		<10.0	μg/L	10	1.00
1,3,5-Trimethylbenzene		16.1	μg/L	10	1.00
tert-Butylbenzene		<10.0	μg/L	10	1.00
1,2,4-Trimethylbenzene		45.9	μg/L	10	1.00
1,4-Dichlorobenzene (para)		<10.0	μg/L	10	1.00
sec-Butylbenzene		<10.0	μg/L	10	1.00
1,3-Dichlorobenzene (meta)		<10.0	μg/L	10	1.00
p-Isopropyltoluene		<10.0	μg/L	10	1.00
4-Chlorotoluene		<10.0	μg/L	10	1.00
1,2-Dichlorobenzene (ortho)		<10.0	μg/L	10	1.00
n-Butylbenzene		<10.0	μg/L	10	1.00
1,2-Dibromo-3-chloropropane		<50.0	μg/L	10	5.00
1,2,3-Trichlorobenzene		<50.0	μg/L	10	5.00
1,2,4-Trichlorobenzene		<50.0	μg/L	10	5.00
Naphthalene		<50.0	μg/L	10	5.00
Hexachlorobutadiene		<50.0	μg/L	10	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.9	μg/L	1	50.0	100	70 - 130
Toluene-d8		49.9	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		45.6	μg/L	1	50.0	91	70 - 130

Sample: 28648 - HLSF-0154-TB-214

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8079	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7212	Date Prepared:	2004-03-08	Prepared By:	JG

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

continued . . .

sample 28648 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.2	μg/L	1	50.0	100	70 - 130
Toluene-d8		50.0	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		45.7	μg/L	1	50.0	91	70 - 130

Sample: 28649 - HLSF-0154-DRW-016-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8079	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7212	Date Prepared:	2004-03-08	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00

continued . . .

sample 28649 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		<1.00	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		68.3	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		<1.00	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00

continued . . .

sample 28649 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
n-Butylbenzene		<1.00	µg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5.00
Naphthalene		<5.00	µg/L	1	5.00
Hexachlorobutadiene		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.2	µg/L	1	50.0	102	70 - 130
Toluene-d8		49.8	µg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		46.1	µg/L	1	50.0	92	70 - 130

Sample: 28650 - HLSF-0154-TB-219

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8079	Date Analyzed:	2004-03-08	Analyzed By:	JG
Prep Batch:	7212	Date Prepared:	2004-03-08	Prepared By:	JG

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

continued . . .

sample 28650 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.8	μg/L	1	50.0	100	70 - 130
Toluene-d8		50.7	μg/L	1	50.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)		45.2	μg/L	1	50.0	90	70 - 130

Sample: 28651 - HLSF-0154-HCF-007-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8193	Date Analyzed:	2004-03-11	Analyzed By:	JG
Prep Batch:	7310	Date Prepared:	2004-03-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<5.00	µg/L	5	1.00
Dichlorodifluoromethane		<5.00	µg/L	5	1.00
Chloromethane (methyl chloride)		<5.00	µg/L	5	1.00
Vinyl Chloride		<5.00	µg/L	5	1.00
Bromomethane (methyl bromide)		<25.0	µg/L	5	5.00
Chloroethane		<5.00	µg/L	5	1.00
Trichlorofluoromethane		<5.00	µg/L	5	1.00
Acetone		<50.0	µg/L	5	10.0
Iodomethane (methyl iodide)		<25.0	µg/L	5	5.00
Carbon Disulfide		9.35	µg/L	5	1.00
Acrylonitrile		<5.00	µg/L	5	1.00
2-Butanone (MEK)		<25.0	µg/L	5	5.00
4-Methyl-2-pentanone (MIBK)		<25.0	µg/L	5	5.00
2-Hexanone		<25.0	µg/L	5	5.00
trans 1,4-Dichloro-2-butene		<50.0	µg/L	5	10.0
1,1-Dichloroethene		<5.00	µg/L	5	1.00
Methylene chloride		<25.0	µg/L	5	5.00
MTBE		<5.00	µg/L	5	1.00
trans-1,2-Dichloroethene		<5.00	µg/L	5	1.00
1,1-Dichloroethane		49.5	µg/L	5	1.00
cis-1,2-Dichloroethene		<5.00	µg/L	5	1.00
2,2-Dichloropropane		<5.00	µg/L	5	1.00
1,2-Dichloroethane (EDC)		<5.00	µg/L	5	1.00
Chloroform		<5.00	µg/L	5	1.00
1,1,1-Trichloroethane		<5.00	µg/L	5	1.00
1,1-Dichloropropene		<5.00	µg/L	5	1.00
Benzene		34.6	µg/L	5	1.00
Carbon Tetrachloride		<5.00	µg/L	5	1.00
1,2-Dichloropropane		<5.00	µg/L	5	1.00
Trichloroethene (TCE)		<5.00	µg/L	5	1.00
Dibromomethane (methylene bromide)		<5.00	µg/L	5	1.00
Bromodichloromethane		<5.00	µg/L	5	1.00
2-Chloroethyl vinyl ether		<25.0	µg/L	5	5.00
cis-1,3-Dichloropropene		<5.00	µg/L	5	1.00
trans-1,3-Dichloropropene		<5.00	µg/L	5	1.00
Toluene		<5.00	µg/L	5	1.00
1,1,2-Trichloroethane		<5.00	µg/L	5	1.00
1,3-Dichloropropane		<5.00	µg/L	5	1.00
Dibromochloromethane		<5.00	µg/L	5	1.00
1,2-Dibromoethane (EDB)		<5.00	µg/L	5	1.00
Tetrachloroethene (PCE)		<5.00	µg/L	5	1.00
Chlorobenzene		<5.00	µg/L	5	1.00
1,1,1,2-Tetrachloroethane		<5.00	µg/L	5	1.00
Ethylbenzene		5.80	µg/L	5	1.00
m,p-Xylene		<5.00	µg/L	5	1.00
Bromoform		<5.00	µg/L	5	1.00
Styrene		<5.00	µg/L	5	1.00
o-Xylene		<5.00	µg/L	5	1.00
1,1,2,2-Tetrachloroethane		<5.00	µg/L	5	1.00

continued . . .

sample 28651 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2-Chlorotoluene		<5.00	µg/L	5	1.00
1,2,3-Trichloropropane		<5.00	µg/L	5	1.00
Isopropylbenzene		9.40	µg/L	5	1.00
Bromobenzene		<5.00	µg/L	5	1.00
n-Propylbenzene		5.75	µg/L	5	1.00
1,3,5-Trimethylbenzene		27.6	µg/L	5	1.00
tert-Butylbenzene		<5.00	µg/L	5	1.00
1,2,4-Trimethylbenzene		95.5	µg/L	5	1.00
1,4-Dichlorobenzene (para)		<5.00	µg/L	5	1.00
sec-Butylbenzene		9.30	µg/L	5	1.00
1,3-Dichlorobenzene (meta)		<5.00	µg/L	5	1.00
p-Isopropyltoluene		5.80	µg/L	5	1.00
4-Chlorotoluene		<5.00	µg/L	5	1.00
1,2-Dichlorobenzene (ortho)		<5.00	µg/L	5	1.00
n-Butylbenzene		<5.00	µg/L	5	1.00
1,2-Dibromo-3-chloropropane		<25.0	µg/L	5	5.00
1,2,3-Trichlorobenzene		<25.0	µg/L	5	5.00
1,2,4-Trichlorobenzene		<25.0	µg/L	5	5.00
Naphthalene		61.8	µg/L	5	5.00
Hexachlorobutadiene		<25.0	µg/L	5	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.6	µg/L	1	50.0	103	70 - 130
Toluene-d8		49.5	µg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		50.6	µg/L	1	50.0	101	70 - 130

Sample: 28652 - HLSF-0154-TB-223

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8171	Date Analyzed:	2004-03-10	Analyzed By:	JG
Prep Batch:	7291	Date Prepared:	2004-03-10	Prepared By:	JG

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

continued . . .

sample 28652 continued . . .

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

continued . . .

sample 28652 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.7	μg/L	1	50.0	107	70 - 130
Toluene-d8		51.6	μg/L	1	50.0	103	70 - 130
4-Bromofluorobenzene (4-BFB)		49.1	μg/L	1	50.0	98	70 - 130

Sample: 28653 - HLSF-0154-DRW-001-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8193	Date Analyzed:	2004-03-11	Analyzed By:	JG
Prep Batch:	7310	Date Prepared:	2004-03-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<5.00	μg/L	5	1.00
Dichlorodifluoromethane		<5.00	μg/L	5	1.00
Chloromethane (methyl chloride)		<5.00	μg/L	5	1.00
Vinyl Chloride		<5.00	μg/L	5	1.00
Bromomethane (methyl bromide)		<25.0	μg/L	5	5.00
Chloroethane		<5.00	μg/L	5	1.00
Trichlorofluoromethane		<5.00	μg/L	5	1.00
Acetone		<50.0	μg/L	5	10.0
Iodomethane (methyl iodide)		<25.0	μg/L	5	5.00
Carbon Disulfide		<5.00	μg/L	5	1.00
Acrylonitrile		<5.00	μg/L	5	1.00
2-Butanone (MEK)		<25.0	μg/L	5	5.00
4-Methyl-2-pentanone (MIBK)		<25.0	μg/L	5	5.00
2-Hexanone		<25.0	μg/L	5	5.00
trans 1,4-Dichloro-2-butene		<50.0	μg/L	5	10.0
1,1-Dichloroethene		<5.00	μg/L	5	1.00
Methylene chloride		<25.0	μg/L	5	5.00
MTBE		7.35	μg/L	5	1.00
trans-1,2-Dichloroethene		<5.00	μg/L	5	1.00
1,1-Dichloroethane		27.2	μg/L	5	1.00
cis-1,2-Dichloroethene		<5.00	μg/L	5	1.00
2,2-Dichloropropane		<5.00	μg/L	5	1.00
1,2-Dichloroethane (EDC)		<5.00	μg/L	5	1.00
Chloroform		<5.00	μg/L	5	1.00
1,1,1-Trichloroethane		<5.00	μg/L	5	1.00
1,1-Dichloropropene		<5.00	μg/L	5	1.00
Benzene		19.3	μg/L	5	1.00
Carbon Tetrachloride		<5.00	μg/L	5	1.00
1,2-Dichloropropane		<5.00	μg/L	5	1.00
Trichloroethene (TCE)		<5.00	μg/L	5	1.00

continued . . .

sample 28653 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dibromomethane (methylene bromide)		<5.00	µg/L	5	1.00
Bromodichloromethane		<5.00	µg/L	5	1.00
2-Chloroethyl vinyl ether		<25.0	µg/L	5	5.00
cis-1,3-Dichloropropene		<5.00	µg/L	5	1.00
trans-1,3-Dichloropropene		<5.00	µg/L	5	1.00
Toluene		<5.00	µg/L	5	1.00
1,1,2-Trichloroethane		<5.00	µg/L	5	1.00
1,3-Dichloropropane		<5.00	µg/L	5	1.00
Dibromochloromethane		<5.00	µg/L	5	1.00
1,2-Dibromoethane (EDB)		<5.00	µg/L	5	1.00
Tetrachloroethene (PCE)		<5.00	µg/L	5	1.00
Chlorobenzene		<5.00	µg/L	5	1.00
1,1,1,2-Tetrachloroethane		<5.00	µg/L	5	1.00
Ethylbenzene		15.6	µg/L	5	1.00
m,p-Xylene		<5.00	µg/L	5	1.00
Bromoform		<5.00	µg/L	5	1.00
Styrene		<5.00	µg/L	5	1.00
o-Xylene		<5.00	µg/L	5	1.00
1,1,2,2-Tetrachloroethane		<5.00	µg/L	5	1.00
2-Chlorotoluene		<5.00	µg/L	5	1.00
1,2,3-Trichloropropane		<5.00	µg/L	5	1.00
Isopropylbenzene		14.8	µg/L	5	1.00
Bromobenzene		<5.00	µg/L	5	1.00
n-Propylbenzene		14.0	µg/L	5	1.00
1,3,5-Trimethylbenzene		16.4	µg/L	5	1.00
tert-Butylbenzene		<5.00	µg/L	5	1.00
1,2,4-Trimethylbenzene		76.0	µg/L	5	1.00
1,4-Dichlorobenzene (para)		<5.00	µg/L	5	1.00
sec-Butylbenzene		10.3	µg/L	5	1.00
1,3-Dichlorobenzene (meta)		<5.00	µg/L	5	1.00
p-Isopropyltoluene		6.25	µg/L	5	1.00
4-Chlorotoluene		<5.00	µg/L	5	1.00
1,2-Dichlorobenzene (ortho)		<5.00	µg/L	5	1.00
n-Butylbenzene		7.25	µg/L	5	1.00
1,2-Dibromo-3-chloropropane		<25.0	µg/L	5	5.00
1,2,3-Trichlorobenzene		<25.0	µg/L	5	5.00
1,2,4-Trichlorobenzene		<25.0	µg/L	5	5.00
Naphthalene		163	µg/L	5	5.00
Hexachlorobutadiene		<25.0	µg/L	5	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.7	µg/L	1	50.0	103	70 - 130
Toluene-d8		49.6	µg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		50.1	µg/L	1	50.0	100	70 - 130

Sample: 28654 - HLSF-0154-TB-211

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8171	Date Analyzed:	2004-03-10	Analyzed By:	JG

Prep Batch: 7291 Date Prepared: 2004-03-10 Prepared By: JG

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

continued . . .

sample 28654 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.3	μg/L	1	50.0	109	70 - 130
Toluene-d8		50.7	μg/L	1	50.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)		48.8	μg/L	1	50.0	98	70 - 130

Sample: 28655 - HLSF-0154-HCF-005-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8171	Date Analyzed:	2004-03-10	Analyzed By:	JG
Prep Batch:	7291	Date Prepared:	2004-03-10	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<10.0	μg/L	10	1.00
Dichlorodifluoromethane		<10.0	μg/L	10	1.00
Chloromethane (methyl chloride)		<10.0	μg/L	10	1.00
Vinyl Chloride		<10.0	μg/L	10	1.00
Bromomethane (methyl bromide)		<50.0	μg/L	10	5.00
Chloroethane		<10.0	μg/L	10	1.00
Trichlorofluoromethane		<10.0	μg/L	10	1.00
Acetone		<100	μg/L	10	10.0
Iodomethane (methyl iodide)		<50.0	μg/L	10	5.00
Carbon Disulfide		<10.0	μg/L	10	1.00
Acrylonitrile		<10.0	μg/L	10	1.00
2-Butanone (MEK)		<50.0	μg/L	10	5.00
4-Methyl-2-pentanone (MIBK)		<50.0	μg/L	10	5.00
2-Hexanone		<50.0	μg/L	10	5.00
trans 1,4-Dichloro-2-butene		<100	μg/L	10	10.0
1,1-Dichloroethene		<10.0	μg/L	10	1.00

continued . . .

sample 28655 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Methylene chloride		<50.0	μg/L	10	5.00
MTBE		<10.0	μg/L	10	1.00
trans-1,2-Dichloroethene		<10.0	μg/L	10	1.00
1,1-Dichloroethane		23.0	μg/L	10	1.00
cis-1,2-Dichloroethene		<10.0	μg/L	10	1.00
2,2-Dichloropropane		<10.0	μg/L	10	1.00
1,2-Dichloroethane (EDC)		<10.0	μg/L	10	1.00
Chloroform		<10.0	μg/L	10	1.00
1,1,1-Trichloroethane		<10.0	μg/L	10	1.00
1,1-Dichloropropene		<10.0	μg/L	10	1.00
Benzene		26.7	μg/L	10	1.00
Carbon Tetrachloride		<10.0	μg/L	10	1.00
1,2-Dichloropropane		<10.0	μg/L	10	1.00
Trichloroethene (TCE)		<10.0	μg/L	10	1.00
Dibromomethane (methylene bromide)		<10.0	μg/L	10	1.00
Bromodichloromethane		<10.0	μg/L	10	1.00
2-Chloroethyl vinyl ether		<50.0	μg/L	10	5.00
cis-1,3-Dichloropropene		<10.0	μg/L	10	1.00
trans-1,3-Dichloropropene		<10.0	μg/L	10	1.00
Toluene		<10.0	μg/L	10	1.00
1,1,2-Trichloroethane		<10.0	μg/L	10	1.00
1,3-Dichloropropane		<10.0	μg/L	10	1.00
Dibromochloromethane		<10.0	μg/L	10	1.00
1,2-Dibromoethane (EDB)		<10.0	μg/L	10	1.00
Tetrachloroethene (PCE)		<10.0	μg/L	10	1.00
Chlorobenzene		<10.0	μg/L	10	1.00
1,1,1,2-Tetrachloroethane		<10.0	μg/L	10	1.00
Ethylbenzene		<10.0	μg/L	10	1.00
m,p-Xylene		<10.0	μg/L	10	1.00
Bromoform		<10.0	μg/L	10	1.00
Styrene		<10.0	μg/L	10	1.00
o-Xylene		<10.0	μg/L	10	1.00
1,1,2,2-Tetrachloroethane		<10.0	μg/L	10	1.00
2-Chlorotoluene		<10.0	μg/L	10	1.00
1,2,3-Trichloropropane		<10.0	μg/L	10	1.00
Isopropylbenzene		<10.0	μg/L	10	1.00
Bromobenzene		<10.0	μg/L	10	1.00
n-Propylbenzene		<10.0	μg/L	10	1.00
1,3,5-Trimethylbenzene		<10.0	μg/L	10	1.00
tert-Butylbenzene		<10.0	μg/L	10	1.00
1,2,4-Trimethylbenzene		30.1	μg/L	10	1.00
1,4-Dichlorobenzene (para)		<10.0	μg/L	10	1.00
sec-Butylbenzene		<10.0	μg/L	10	1.00
1,3-Dichlorobenzene (meta)		<10.0	μg/L	10	1.00
p-Isopropyltoluene		<10.0	μg/L	10	1.00
4-Chlorotoluene		<10.0	μg/L	10	1.00
1,2-Dichlorobenzene (ortho)		<10.0	μg/L	10	1.00
n-Butylbenzene		<10.0	μg/L	10	1.00
1,2-Dibromo-3-chloropropane		<50.0	μg/L	10	5.00
1,2,3-Trichlorobenzene		<50.0	μg/L	10	5.00
1,2,4-Trichlorobenzene		<50.0	μg/L	10	5.00

continued . . .

sample 28655 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		98.3	µg/L	10	5.00
Hexachlorobutadiene		<50.0	µg/L	10	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.0	µg/L	1	50.0	106	70 - 130
Toluene-d8		50.7	µg/L	1	50.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)		48.8	µg/L	1	50.0	98	70 - 130

Sample: 28656 - HLSF-0154-TB-221

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8171	Date Analyzed:	2004-03-10	Analyzed By:	JG
Prep Batch:	7291	Date Prepared:	2004-03-10	Prepared By:	JG

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

continued . . .

sample 28656 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.7	μg/L	1	50.0	109	70 - 130
Toluene-d8		51.4	μg/L	1	50.0	103	70 - 130
4-Bromofluorobenzene (4-BFB)		48.0	μg/L	1	50.0	96	70 - 130

Sample: 28657 - HLSF-0154-HCF-105-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8193	Date Analyzed:	2004-03-11	Analyzed By:	JG
Prep Batch:	7310	Date Prepared:	2004-03-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<5.00	µg/L	5	1.00
Dichlorodifluoromethane		<5.00	µg/L	5	1.00
Chloromethane (methyl chloride)		<5.00	µg/L	5	1.00
Vinyl Chloride		<5.00	µg/L	5	1.00
Bromomethane (methyl bromide)		<25.0	µg/L	5	5.00
Chloroethane		<5.00	µg/L	5	1.00
Trichlorofluoromethane		<5.00	µg/L	5	1.00
Acetone		<50.0	µg/L	5	10.0
Iodomethane (methyl iodide)		<25.0	µg/L	5	5.00
Carbon Disulfide		<5.00	µg/L	5	1.00
Acrylonitrile		<5.00	µg/L	5	1.00
2-Butanone (MEK)		<25.0	µg/L	5	5.00
4-Methyl-2-pentanone (MIBK)		<25.0	µg/L	5	5.00
2-Hexanone		<25.0	µg/L	5	5.00
trans 1,4-Dichloro-2-butene		<50.0	µg/L	5	10.0
1,1-Dichloroethene		<5.00	µg/L	5	1.00
Methylene chloride		<25.0	µg/L	5	5.00
MTBE		5.00	µg/L	5	1.00
trans-1,2-Dichloroethene		<5.00	µg/L	5	1.00
1,1-Dichloroethane		21.4	µg/L	5	1.00
cis-1,2-Dichloroethene		<5.00	µg/L	5	1.00
2,2-Dichloropropane		<5.00	µg/L	5	1.00
1,2-Dichloroethane (EDC)		<5.00	µg/L	5	1.00
Chloroform		<5.00	µg/L	5	1.00
1,1,1-Trichloroethane		<5.00	µg/L	5	1.00
1,1-Dichloropropene		<5.00	µg/L	5	1.00
Benzene		25.4	µg/L	5	1.00
Carbon Tetrachloride		<5.00	µg/L	5	1.00
1,2-Dichloropropane		<5.00	µg/L	5	1.00
Trichloroethene (TCE)		<5.00	µg/L	5	1.00
Dibromomethane (methylene bromide)		<5.00	µg/L	5	1.00
Bromodichloromethane		<5.00	µg/L	5	1.00
2-Chloroethyl vinyl ether		<25.0	µg/L	5	5.00
cis-1,3-Dichloropropene		<5.00	µg/L	5	1.00
trans-1,3-Dichloropropene		<5.00	µg/L	5	1.00
Toluene		<5.00	µg/L	5	1.00
1,1,2-Trichloroethane		<5.00	µg/L	5	1.00
1,3-Dichloropropane		<5.00	µg/L	5	1.00
Dibromochloromethane		<5.00	µg/L	5	1.00
1,2-Dibromoethane (EDB)		<5.00	µg/L	5	1.00
Tetrachloroethene (PCE)		<5.00	µg/L	5	1.00
Chlorobenzene		<5.00	µg/L	5	1.00
1,1,1,2-Tetrachloroethane		<5.00	µg/L	5	1.00
Ethylbenzene		9.00	µg/L	5	1.00
m,p-Xylene		<5.00	µg/L	5	1.00
Bromoform		<5.00	µg/L	5	1.00
Styrene		<5.00	µg/L	5	1.00
o-Xylene		<5.00	µg/L	5	1.00
1,1,2,2-Tetrachloroethane		<5.00	µg/L	5	1.00
2-Chlorotoluene		<5.00	µg/L	5	1.00
1,2,3-Trichloropropane		<5.00	µg/L	5	1.00
Isopropylbenzene		5.95	µg/L	5	1.00

continued . . .

sample 28657 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bromobenzene		<5.00	µg/L	5	1.00
n-Propylbenzene		6.35	µg/L	5	1.00
1,3,5-Trimethylbenzene		5.90	µg/L	5	1.00
tert-Butylbenzene		<5.00	µg/L	5	1.00
1,2,4-Trimethylbenzene		29.6	µg/L	5	1.00
1,4-Dichlorobenzene (para)		<5.00	µg/L	5	1.00
sec-Butylbenzene		<5.00	µg/L	5	1.00
1,3-Dichlorobenzene (meta)		<5.00	µg/L	5	1.00
p-Isopropyltoluene		<5.00	µg/L	5	1.00
4-Chlorotoluene		<5.00	µg/L	5	1.00
1,2-Dichlorobenzene (ortho)		<5.00	µg/L	5	1.00
n-Butylbenzene		<5.00	µg/L	5	1.00
1,2-Dibromo-3-chloropropane		<25.0	µg/L	5	5.00
1,2,3-Trichlorobenzene		<25.0	µg/L	5	5.00
1,2,4-Trichlorobenzene		<25.0	µg/L	5	5.00
Naphthalene		155	µg/L	5	5.00
Hexachlorobutadiene		<25.0	µg/L	5	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.3	µg/L	1	50.0	103	70 - 130
Toluene-d8		48.9	µg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		49.8	µg/L	1	50.0	100	70 - 130

Sample: 28658 - HLSF-0154-TB-222

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8171	Date Analyzed:	2004-03-10	Analyzed By:	JG
Prep Batch:	7291	Date Prepared:	2004-03-10	Prepared By:	JG

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

continued . . .

sample 28658 continued . . .

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

continued . . .

sample 28658 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		55.0	µg/L	1	50.0	110	70 - 130
Toluene-d8		51.5	µg/L	1	50.0	103	70 - 130
4-Bromofluorobenzene (4-BFB)		47.6	µg/L	1	50.0	95	70 - 130

Sample: 28659 - HLSF-0154-DRW-013-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8171	Date Analyzed:	2004-03-10	Analyzed By:	JG
Prep Batch:	7291	Date Prepared:	2004-03-10	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		3.25	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		2.59	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00

continued . . .

sample 28659 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		55.9	μg/L	1	50.0	112	70 - 130
Toluene-d8		52.2	μg/L	1	50.0	104	70 - 130
4-Bromofluorobenzene (4-BFB)		46.7	μg/L	1	50.0	93	70 - 130

Sample: 28660 - HLSF-0154-TB-218

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8171	Date Analyzed:	2004-03-10	Analyzed By:	JG
Prep Batch:	7291	Date Prepared:	2004-03-10	Prepared By:	JG

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

continued . . .

sample 28660 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.4	μg/L	1	50.0	109	70 - 130
Toluene-d8		51.6	μg/L	1	50.0	103	70 - 130
4-Bromofluorobenzene (4-BFB)		47.3	μg/L	1	50.0	95	70 - 130

Sample: 28871 - HLSF-0154-DRW-005-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8193	Date Analyzed:	2004-03-11	Analyzed By:	JG
Prep Batch:	7310	Date Prepared:	2004-03-11	Prepared By:	JG

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

continued . . .

sample 28871 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		12.3	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		2.22	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		1.57	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		2.30	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		1.59	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		5.88	μg/L	1	5.00

continued . . .

sample 28871 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.8	μg/L	1	50.0	106	70 - 130
Toluene-d8		49.6	μg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		48.6	μg/L	1	50.0	97	70 - 130

Sample: 28872 - HLSF-0154-TB-216

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8193	Date Analyzed:	2004-03-11	Analyzed By:	JG
Prep Batch:	7310	Date Prepared:	2004-03-11	Prepared By:	JG

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

continued . . .

sample 28872 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.4	μg/L	1	50.0	107	70 - 130
Toluene-d8		50.2	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		48.9	μg/L	1	50.0	98	70 - 130

Sample: 28873 - HLSF-0154-DRW-002-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8193	Date Analyzed:	2004-03-11	Analyzed By:	JG
Prep Batch:	7310	Date Prepared:	2004-03-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<10.0	μg/L	10	1.00
Dichlorodifluoromethane		<10.0	μg/L	10	1.00
Chloromethane (methyl chloride)		<10.0	μg/L	10	1.00
Vinyl Chloride		<10.0	μg/L	10	1.00
Bromomethane (methyl bromide)		<50.0	μg/L	10	5.00
Chloroethane		<10.0	μg/L	10	1.00
Trichlorofluoromethane		<10.0	μg/L	10	1.00
Acetone		<100	μg/L	10	10.0
Iodomethane (methyl iodide)		<50.0	μg/L	10	5.00
Carbon Disulfide		<10.0	μg/L	10	1.00
Acrylonitrile		<10.0	μg/L	10	1.00
2-Butanone (MEK)		<50.0	μg/L	10	5.00
4-Methyl-2-pentanone (MIBK)		<50.0	μg/L	10	5.00
2-Hexanone		<50.0	μg/L	10	5.00
trans 1,4-Dichloro-2-butene		<100	μg/L	10	10.0
1,1-Dichloroethene		<10.0	μg/L	10	1.00
Methylene chloride		<50.0	μg/L	10	5.00
MTBE		<10.0	μg/L	10	1.00
trans-1,2-Dichloroethene		<10.0	μg/L	10	1.00
1,1-Dichloroethane		24.1	μg/L	10	1.00
cis-1,2-Dichloroethene		<10.0	μg/L	10	1.00
2,2-Dichloropropane		<10.0	μg/L	10	1.00
1,2-Dichloroethane (EDC)		<10.0	μg/L	10	1.00
Chloroform		<10.0	μg/L	10	1.00
1,1,1-Trichloroethane		<10.0	μg/L	10	1.00
1,1-Dichloropropene		<10.0	μg/L	10	1.00
Benzene		34.0	μg/L	10	1.00
Carbon Tetrachloride		<10.0	μg/L	10	1.00
1,2-Dichloropropane		<10.0	μg/L	10	1.00
Trichloroethene (TCE)		<10.0	μg/L	10	1.00
Dibromomethane (methylene bromide)		<10.0	μg/L	10	1.00
Bromodichloromethane		<10.0	μg/L	10	1.00
2-Chloroethyl vinyl ether		<50.0	μg/L	10	5.00
cis-1,3-Dichloropropene		<10.0	μg/L	10	1.00
trans-1,3-Dichloropropene		<10.0	μg/L	10	1.00
Toluene		<10.0	μg/L	10	1.00
1,1,2-Trichloroethane		<10.0	μg/L	10	1.00
1,3-Dichloropropane		<10.0	μg/L	10	1.00
Dibromochloromethane		<10.0	μg/L	10	1.00
1,2-Dibromoethane (EDB)		<10.0	μg/L	10	1.00
Tetrachloroethene (PCE)		<10.0	μg/L	10	1.00
Chlorobenzene		<10.0	μg/L	10	1.00
1,1,1,2-Tetrachloroethane		<10.0	μg/L	10	1.00
Ethylbenzene		<10.0	μg/L	10	1.00
m,p-Xylene		<10.0	μg/L	10	1.00
Bromoform		<10.0	μg/L	10	1.00
Styrene		<10.0	μg/L	10	1.00
o-Xylene		<10.0	μg/L	10	1.00
1,1,2,2-Tetrachloroethane		<10.0	μg/L	10	1.00
2-Chlorotoluene		<10.0	μg/L	10	1.00
1,2,3-Trichloropropane		<10.0	μg/L	10	1.00
Isopropylbenzene		<10.0	μg/L	10	1.00

continued . . .

sample 28873 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bromobenzene		<10.0	μg/L	10	1.00
n-Propylbenzene		<10.0	μg/L	10	1.00
1,3,5-Trimethylbenzene		<10.0	μg/L	10	1.00
tert-Butylbenzene		<10.0	μg/L	10	1.00
1,2,4-Trimethylbenzene		17.9	μg/L	10	1.00
1,4-Dichlorobenzene (para)		<10.0	μg/L	10	1.00
sec-Butylbenzene		<10.0	μg/L	10	1.00
1,3-Dichlorobenzene (meta)		<10.0	μg/L	10	1.00
p-Isopropyltoluene		<10.0	μg/L	10	1.00
4-Chlorotoluene		<10.0	μg/L	10	1.00
1,2-Dichlorobenzene (ortho)		<10.0	μg/L	10	1.00
n-Butylbenzene		<10.0	μg/L	10	1.00
1,2-Dibromo-3-chloropropane		<50.0	μg/L	10	5.00
1,2,3-Trichlorobenzene		<50.0	μg/L	10	5.00
1,2,4-Trichlorobenzene		<50.0	μg/L	10	5.00
Naphthalene		51.5	μg/L	10	5.00
Hexachlorobutadiene		<50.0	μg/L	10	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.5	μg/L	1	50.0	109	70 - 130
Toluene-d8		50.4	μg/L	1	50.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)		48.1	μg/L	1	50.0	96	70 - 130

Sample: 28874 - HLSF-0154-TB-212

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8193	Date Analyzed:	2004-03-11	Analyzed By:	JG
Prep Batch:	7310	Date Prepared:	2004-03-11	Prepared By:	JG

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

continued . . .

sample 28874 continued . . .

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

continued . . .

sample 28874 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.2	μg/L	1	50.0	108	70 - 130
Toluene-d8		51.2	μg/L	1	50.0	102	70 - 130
4-Bromofluorobenzene (4-BFB)		48.1	μg/L	1	50.0	96	70 - 130

Sample: 28875 - HLSF-0154-DRW-004-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8193	Date Analyzed:	2004-03-11	Analyzed By:	JG
Prep Batch:	7310	Date Prepared:	2004-03-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<10.0	μg/L	10	1.00
Dichlorodifluoromethane		<10.0	μg/L	10	1.00
Chloromethane (methyl chloride)		<10.0	μg/L	10	1.00
Vinyl Chloride		<10.0	μg/L	10	1.00
Bromomethane (methyl bromide)		<50.0	μg/L	10	5.00
Chloroethane		<10.0	μg/L	10	1.00
Trichlorofluoromethane		<10.0	μg/L	10	1.00
Acetone		<100	μg/L	10	10.0
Iodomethane (methyl iodide)		<50.0	μg/L	10	5.00
Carbon Disulfide		<10.0	μg/L	10	1.00
Acrylonitrile		<10.0	μg/L	10	1.00
2-Butanone (MEK)		<50.0	μg/L	10	5.00
4-Methyl-2-pentanone (MIBK)		<50.0	μg/L	10	5.00
2-Hexanone		<50.0	μg/L	10	5.00
trans 1,4-Dichloro-2-butene		<100	μg/L	10	10.0
1,1-Dichloroethene		<10.0	μg/L	10	1.00
Methylene chloride		<50.0	μg/L	10	5.00
MTBE		<10.0	μg/L	10	1.00
trans-1,2-Dichloroethene		<10.0	μg/L	10	1.00
1,1-Dichloroethane		123	μg/L	10	1.00
cis-1,2-Dichloroethene		<10.0	μg/L	10	1.00
2,2-Dichloropropane		<10.0	μg/L	10	1.00
1,2-Dichloroethane (EDC)		<10.0	μg/L	10	1.00
Chloroform		<10.0	μg/L	10	1.00
1,1,1-Trichloroethane		<10.0	μg/L	10	1.00
1,1-Dichloropropene		<10.0	μg/L	10	1.00
Benzene		12.3	μg/L	10	1.00
Carbon Tetrachloride		<10.0	μg/L	10	1.00
1,2-Dichloropropane		<10.0	μg/L	10	1.00
Trichloroethene (TCE)		<10.0	μg/L	10	1.00
Dibromomethane (methylene bromide)		<10.0	μg/L	10	1.00
Bromodichloromethane		<10.0	μg/L	10	1.00
2-Chloroethyl vinyl ether		<50.0	μg/L	10	5.00

continued . . .

sample 28875 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
cis-1,3-Dichloropropene		<10.0	μg/L	10	1.00
trans-1,3-Dichloropropene		<10.0	μg/L	10	1.00
Toluene		<10.0	μg/L	10	1.00
1,1,2-Trichloroethane		<10.0	μg/L	10	1.00
1,3-Dichloropropane		<10.0	μg/L	10	1.00
Dibromochloromethane		<10.0	μg/L	10	1.00
1,2-Dibromoethane (EDB)		<10.0	μg/L	10	1.00
Tetrachloroethene (PCE)		<10.0	μg/L	10	1.00
Chlorobenzene		<10.0	μg/L	10	1.00
1,1,1,2-Tetrachloroethane		<10.0	μg/L	10	1.00
Ethylbenzene		<10.0	μg/L	10	1.00
m,p-Xylene		<10.0	μg/L	10	1.00
Bromoform		<10.0	μg/L	10	1.00
Styrene		<10.0	μg/L	10	1.00
o-Xylene		<10.0	μg/L	10	1.00
1,1,2,2-Tetrachloroethane		<10.0	μg/L	10	1.00
2-Chlorotoluene		<10.0	μg/L	10	1.00
1,2,3-Trichloropropane		<10.0	μg/L	10	1.00
Isopropylbenzene		<10.0	μg/L	10	1.00
Bromobenzene		<10.0	μg/L	10	1.00
n-Propylbenzene		<10.0	μg/L	10	1.00
1,3,5-Trimethylbenzene		<10.0	μg/L	10	1.00
tert-Butylbenzene		<10.0	μg/L	10	1.00
1,2,4-Trimethylbenzene		<10.0	μg/L	10	1.00
1,4-Dichlorobenzene (para)		<10.0	μg/L	10	1.00
sec-Butylbenzene		<10.0	μg/L	10	1.00
1,3-Dichlorobenzene (meta)		<10.0	μg/L	10	1.00
p-Isopropyltoluene		<10.0	μg/L	10	1.00
4-Chlorotoluene		<10.0	μg/L	10	1.00
1,2-Dichlorobenzene (ortho)		<10.0	μg/L	10	1.00
n-Butylbenzene		<10.0	μg/L	10	1.00
1,2-Dibromo-3-chloropropane		<50.0	μg/L	10	5.00
1,2,3-Trichlorobenzene		<50.0	μg/L	10	5.00
1,2,4-Trichlorobenzene		<50.0	μg/L	10	5.00
Naphthalene		<50.0	μg/L	10	5.00
Hexachlorobutadiene		<50.0	μg/L	10	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.2	μg/L	1	50.0	108	70 - 130
Toluene-d8		50.9	μg/L	1	50.0	102	70 - 130
4-Bromofluorobenzene (4-BFB)		47.2	μg/L	1	50.0	94	70 - 130

Sample: 28876 - HLSF-0154-TB-215

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8193	Date Analyzed:	2004-03-11	Analyzed By:	JG
Prep Batch:	7310	Date Prepared:	2004-03-11	Prepared By:	JG

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

continued . . .

sample 28876 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.7	μg/L	1	50.0	107	70 - 130
Toluene-d8		51.7	μg/L	1	50.0	103	70 - 130
4-Bromofluorobenzene (4-BFB)		48.0	μg/L	1	50.0	96	70 - 130

Sample: 28933 - HLSF-0154-HCF-001-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8201	Date Analyzed:	2004-03-11	Analyzed By:	JG
Prep Batch:	7314	Date Prepared:	2004-03-11	Prepared By:	JG

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

continued . . .

sample 28933 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		2.92	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
Isopropylbenzene		6.31	µg/L	1	1.00
Bromobenzene		<1.00	µg/L	1	1.00
n-Propylbenzene		<1.00	µg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1.00
tert-Butylbenzene		<1.00	µg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1.00
sec-Butylbenzene		4.86	µg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1	1.00
p-Isopropyltoluene		<1.00	µg/L	1	1.00
4-Chlorotoluene		<1.00	µg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1.00
n-Butylbenzene		1.25	µg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5.00
Naphthalene		70.3	µg/L	1	5.00

continued . . .

sample 28933 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.7	μg/L	1	50.0	101	70 - 130
Toluene-d8		49.3	μg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		47.5	μg/L	1	50.0	95	70 - 130

Sample: 28934 - HLSF-0154-TB-220

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8211	Date Analyzed:	2004-03-14	Analyzed By:	JG
Prep Batch:	7319	Date Prepared:	2004-03-14	Prepared By:	JG

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

continued . . .

sample 28934 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.4	μg/L	1	50.0	105	70 - 130
Toluene-d8		49.1	μg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		45.9	μg/L	1	50.0	92	70 - 130

Sample: 28935 - HLSF-0154-DRW-012-0304

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8244	Date Analyzed:	2004-03-15	Analyzed By:	JG
Prep Batch:	7351	Date Prepared:	2004-03-15	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		9.39	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
Isopropylbenzene		<1.00	µg/L	1	1.00

continued . . .

sample 28935 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.1	μg/L	1	50.0	96	70 - 130
Toluene-d8		48.5	μg/L	1	50.0	97	70 - 130
4-Bromofluorobenzene (4-BFB)		47.8	μg/L	1	50.0	96	70 - 130

Sample: 28936 - HLSF-0154-TB-217

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	8244	Date Analyzed:	2004-03-15	Analyzed By:	JG
Prep Batch:	7351	Date Prepared:	2004-03-15	Prepared By:	JG

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

continued . . .

sample 28936 continued . . .

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

continued . . .

sample 28936 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.1	μg/L	1	50.0	96	70 - 130
Toluene-d8		48.5	μg/L	1	50.0	97	70 - 130
4-Bromofluorobenzene (4-BFB)		47.2	μg/L	1	50.0	94	70 - 130

Method Blank (1) QC Batch: 8079

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		47.1	µg/L	1	50.0	94	70 - 130
Toluene-d8		49.8	µg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		43.3	µg/L	1	50.0	87	70 - 130

Method Blank (1) QC Batch: 8171

Parameter	Flag	Result	Units	RL
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)		<5.00	µg/L	5
Chloroethane		<1.00	µg/L	1
Trichlorofluoromethane		<1.00	µg/L	1

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
1,3-Dichlorobenzene (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.0	μg/L	1	50.0	104	70 - 130
Toluene-d8		48.9	μg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		50.3	μg/L	1	50.0	101	70 - 130

Method Blank (1) QC Batch: 8193

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.5	μg/L	1	50.0	103	70 - 130
Toluene-d8		48.8	μg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		49.0	μg/L	1	50.0	98	70 - 130

Method Blank (1) QC Batch: 8201

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.9	μg/L	1	50.0	104	70 - 130
Toluene-d8		49.2	μg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		49.0	μg/L	1	50.0	98	70 - 130

Method Blank (1) QC Batch: 8211

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.4	μg/L	1	50.0	105	70 - 130
Toluene-d8		49.0	μg/L	1	50.0	98	70 - 130

continued . . .

method blank continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		46.0	μg/L	1	50.0	92	70 - 130

Method Blank (1) QC Batch: 8244

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		47.6	μg/L	1	50.0	95	70 - 130
Toluene-d8		48.4	μg/L	1	50.0	97	70 - 130
4-Bromofluorobenzene (4-BFB)		47.8	μg/L	1	50.0	96	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 8079

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	86.7	86.4	μg/L	1	100	<0.136	87	0	78 - 120	20
Benzene	93.4	92.3	μg/L	1	100	<0.146	93	1	84.2 - 108	20
Trichloroethene (TCE)	97.1	96.3	μg/L	1	100	<0.117	97	1	85.8 - 106	20
Toluene	95.3	93.4	μg/L	1	100	0.16	95	2	77.2 - 104	20
Chlorobenzene	94.9	95.3	μg/L	1	100	<0.0540	95	0	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	47.5	47.0	μg/L	1	50.0	95	94	84.2 - 115
Toluene-d8	49.9	49.7	μg/L	1	50.0	100	99	94.6 - 103
4-Bromofluorobenzene (4-BFB)	45.4	44.9	μg/L	1	50.0	91	90	82.4 - 102

Laboratory Control Spike (LCS-1) QC Batch: 8171

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	83.1	88.2	μg/L	1	100	<0.136	83	6	78 - 120	20
Benzene	93.2	98.0	μg/L	1	100	<0.146	93	5	84.2 - 108	20
Trichloroethene (TCE)	87.6	92.2	μg/L	1	100	0.19	88	5	85.8 - 106	20
Toluene	91.7	96.3	μg/L	1	100	0.25	92	5	77.2 - 104	20
Chlorobenzene	91.5	96.1	μg/L	1	100	<0.0540	92	5	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.1	51.4	μg/L	1	50.0	100	103	84.2 - 115
Toluene-d8	49.8	49.7	μg/L	1	50.0	100	99	94.6 - 103
4-Bromofluorobenzene (4-BFB)	50.0	50.4	μg/L	1	50.0	100	101	82.4 - 102

Laboratory Control Spike (LCS-1) QC Batch: 8193

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	83.1	88.2	μg/L	1	100	0.35	83	6	78 - 120	20
Benzene	93.2	98.0	μg/L	1	100	0.37	93	5	84.2 - 108	20
Trichloroethene (TCE)	87.6	92.2	μg/L	1	100	0.41	88	5	85.8 - 106	20
Toluene	91.7	96.3	μg/L	1	100	0.53	92	5	77.2 - 104	20
Chlorobenzene	91.5	96.1	μg/L	1	100	<0.0540	92	5	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.1	51.4	μg/L	1	50.0	100	103	84.2 - 115
Toluene-d8	49.8	49.7	μg/L	1	50.0	100	99	94.6 - 103
4-Bromofluorobenzene (4-BFB)	50.0	50.4	μg/L	1	50.0	100	101	82.4 - 102

Laboratory Control Spike (LCS-1) QC Batch: 8201

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	109	108	μg/L	1	100	<0.136	109	1	78 - 120	20
Benzene	108	107	μg/L	1	100	<0.146	108	1	84.2 - 108	20
Trichloroethene (TCE)	94.4	94.5	μg/L	1	100	<0.117	94	0	85.8 - 106	20
Toluene	103	104	μg/L	1	100	0.15	103	1	77.2 - 104	20
Chlorobenzene	101	101	μg/L	1	100	<0.0540	101	0	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	52.6	53.3	μg/L	1	50.0	105	107	84.2 - 115
Toluene-d8	50.7	50.3	μg/L	1	50.0	101	101	94.6 - 103
4-Bromofluorobenzene (4-BFB)	47.3	48.2	μg/L	1	50.0	95	96	82.4 - 102

Laboratory Control Spike (LCS-1) QC Batch: 8211

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	106	105	μg/L	1	100	<0.136	106	1	78 - 120	20
Benzene	105	104	μg/L	1	100	<0.146	105	1	84.2 - 108	20
Trichloroethene (TCE)	93.8	94.7	μg/L	1	100	0.12	94	1	85.8 - 106	20
Toluene	101	104	μg/L	1	100	0.2	101	3	77.2 - 104	20
Chlorobenzene	97.4	98.8	μg/L	1	100	<0.0540	97	1	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	53.3	52.5	μg/L	1	50.0	107	105	84.2 - 115
Toluene-d8	50.0	49.8	μg/L	1	50.0	100	100	94.6 - 103
4-Bromofluorobenzene (4-BFB)	47.0	46.8	μg/L	1	50.0	94	94	82.4 - 102

Laboratory Control Spike (LCS-1) QC Batch: 8244

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	95.4	93.0	μg/L	1	100	<0.136	95	2	78 - 120	20
Benzene	99.0	97.2	μg/L	1	100	<0.146	99	2	84.2 - 108	20
Trichloroethene (TCE)	94.9	93.5	μg/L	1	100	0.14	95	1	85.8 - 106	20
Toluene	98.7	97.3	μg/L	1	100	0.49	99	1	77.2 - 104	20
Chlorobenzene	97.2	96.9	μg/L	1	100	<0.0540	97	0	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	46.9	46.5	μg/L	1	50.0	94	93	84.2 - 115
Toluene-d8	49.0	48.7	μg/L	1	50.0	98	97	94.6 - 103
4-Bromofluorobenzene (4-BFB)	49.3	48.7	μg/L	1	50.0	99	97	82.4 - 102

Matrix Spike (MS-1) QC Batch: 8079

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	86.8	88.0	μg/L	1	100	<0.136	87	1	74.6 - 124	20
Benzene	89.6	91.0	μg/L	1	100	<0.146	90	2	88.1 - 114	20
Trichloroethene (TCE)	92.9	95.1	μg/L	1	100	<0.117	93	2	86.7 - 104	20
Toluene	89.5	91.3	μg/L	1	100	<0.0600	90	2	84 - 114	20
Chlorobenzene [1]	91.5	94.2	μg/L	1	100	<0.0540	92	3	92.3 - 109	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	50.7	50.7	μg/L	1	50	101	101	86.5 - 113
Toluene-d8	48.7	49.1	μg/L	1	50	97	98	93.7 - 105

continued . . .

[1] recovery within acceptable limits.

matrix spikes continued . . .

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	44.1	44.3	μg/L	1	50	88	89	76.2 - 107

Matrix Spike (MS-1) QC Batch: 8171

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene		92.9	85.6	μg/L	1	100	<0.136	93	8	74.6 - 124	20
Benzene		99.7	94.6	μg/L	1	100	<0.146	100	5	88.1 - 114	20
Trichloroethene (TCE)	[2]	88.3	82.8	μg/L	1	100	<0.117	88	6	86.7 - 104	20
Toluene		97.1	92.4	μg/L	1	100	<0.0600	97	5	84 - 114	20
Chlorobenzene	[3]	95.1	88.3	μg/L	1	100	<0.0540	95	7	92.3 - 109	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	54.4	53.0	μg/L	1	50	109	106	86.5 - 113
Toluene-d8	50.1	48.6	μg/L	1	50	100	97	93.7 - 105
4-Bromofluorobenzene (4-BFB)	46.6	45.8	μg/L	1	50	93	92	76.2 - 107

Standard (CCV-1) QC Batch: 8079

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	52.1	104	80 - 120	2004-03-08
1,1-Dichloroethene		μg/L	50.0	48.4	97	80 - 120	2004-03-08
Chloroform		μg/L	50.0	44.4	89	80 - 120	2004-03-08
1,2-Dichloropropane		μg/L	50.0	48.2	96	80 - 120	2004-03-08
Toluene		μg/L	50.0	48.7	97	80 - 120	2004-03-08
Chlorobenzene		μg/L	50.0	49.4	99	80 - 120	2004-03-08
Ethylbenzene		μg/L	50.0	49.6	99	80 - 120	2004-03-08

Standard (CCV-1) QC Batch: 8171

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	42.8	86	80 - 120	2004-03-10
1,1-Dichloroethene		μg/L	50.0	48.6	97	80 - 120	2004-03-10
Chloroform		μg/L	50.0	48.2	96	80 - 120	2004-03-10
1,2-Dichloropropane		μg/L	50.0	50.6	101	80 - 120	2004-03-10
Toluene		μg/L	50.0	50.7	101	80 - 120	2004-03-10
Chlorobenzene		μg/L	50.0	49.4	99	80 - 120	2004-03-10
Ethylbenzene		μg/L	50.0	52.4	105	80 - 120	2004-03-10

Standard (CCV-1) QC Batch: 8193

[2]recovery out of control due to prep error. LCS/LCSD recoveries within acceptable limits showing analysis to be in control.
[3]recovery out of control due to prep error. LCS/LCSD recoveries within acceptable limits showing analysis to be in control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	49.9	100	80 - 120	2004-03-11
1,1-Dichloroethene		µg/L	50.0	51.4	103	80 - 120	2004-03-11
Chloroform		µg/L	50.0	51.9	104	80 - 120	2004-03-11
1,2-Dichloropropane		µg/L	50.0	53.1	106	80 - 120	2004-03-11
Toluene		µg/L	50.0	51.9	104	80 - 120	2004-03-11
Chlorobenzene		µg/L	50.0	52.1	104	80 - 120	2004-03-11
Ethylbenzene		µg/L	50.0	54.4	109	80 - 120	2004-03-11

Standard (CCV-1) QC Batch: 8201

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	49.9	100	80 - 120	2004-03-11
1,1-Dichloroethene		µg/L	50.0	52.5	105	80 - 120	2004-03-11
Chloroform		µg/L	50.0	51.8	104	80 - 120	2004-03-11
1,2-Dichloropropane		µg/L	50.0	53.6	107	80 - 120	2004-03-11
Toluene		µg/L	50.0	51.7	103	80 - 120	2004-03-11
Chlorobenzene		µg/L	50.0	50.8	102	80 - 120	2004-03-11
Ethylbenzene		µg/L	50.0	53.3	107	80 - 120	2004-03-11

Standard (CCV-1) QC Batch: 8211

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride	[4]	µg/L	50.0	66.2	132	80 - 120	2004-03-14
1,1-Dichloroethene		µg/L	50.0	54.7	109	80 - 120	2004-03-14
Chloroform		µg/L	50.0	52.5	105	80 - 120	2004-03-14
1,2-Dichloropropane		µg/L	50.0	55.2	110	80 - 120	2004-03-14
Toluene		µg/L	50.0	53.5	107	80 - 120	2004-03-14
Chlorobenzene		µg/L	50.0	50.7	101	80 - 120	2004-03-14
Ethylbenzene		µg/L	50.0	54.4	109	80 - 120	2004-03-14

Standard (CCV-1) QC Batch: 8244

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	44.4	89	80 - 120	2004-03-15
1,1-Dichloroethene		µg/L	50.0	54.0	108	80 - 120	2004-03-15
Chloroform		µg/L	50.0	50.4	101	80 - 120	2004-03-15
1,2-Dichloropropane		µg/L	50.0	51.8	104	80 - 120	2004-03-15
Toluene		µg/L	50.0	55.4	111	80 - 120	2004-03-15
Chlorobenzene		µg/L	50.0	52.3	105	80 - 120	2004-03-15
Ethylbenzene		µg/L	50.0	54.7	109	80 - 120	2004-03-15

[4] average of CCC analytes=110 which is within acceptable limits showing analysis to be in control.

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 15, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12019	Date Analyzed:	2004-08-10	Analyzed By:	JG
Prep Batch:	10622	Date Prepared:	2004-08-10	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		220	mg/L as CaCo3	1	4.00
Total Alkalinity		220	mg/L as CaCo3	1	4.00

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12247	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10819	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		666	mg/L as CaCo3	1	4.00
Total Alkalinity		666	mg/L as CaCo3	1	4.00

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12247	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10819	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		194	mg/L as CaCo3	1	4.00
Total Alkalinity		194	mg/L as CaCo3	1	4.00

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12247	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10819	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00

continued . . .

sample 41285 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bicarbonate Alkalinity		284	mg/L as CaCo3	1	4.00
Total Alkalinity		284	mg/L as CaCo3	1	4.00

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12247	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10819	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		194	mg/L as CaCo3	1	4.00
Total Alkalinity		194	mg/L as CaCo3	1	4.00

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12247	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10819	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		2230	mg/L as CaCo3	1	4.00
Total Alkalinity		2230	mg/L as CaCo3	1	4.00

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12247	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10819	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		986	mg/L as CaCo3	1	4.00
Total Alkalinity		986	mg/L as CaCo3	1	4.00

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A

QC Batch:	12247	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10819	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		2730	mg/L as CaCo3	1	4.00
Total Alkalinity		2730	mg/L as CaCo3	1	4.00

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12247	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10819	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		2060	mg/L as CaCo3	1	4.00
Total Alkalinity		2060	mg/L as CaCo3	1	4.00

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12247	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10819	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		1280	mg/L as CaCo3	1	4.00
Total Alkalinity		1280	mg/L as CaCo3	1	4.00

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12366	Date Analyzed:	2004-08-30	Analyzed By:	JG
Prep Batch:	10921	Date Prepared:	2004-08-30	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		1760	mg/L as CaCo3	1	4.00
Total Alkalinity		1760	mg/L as CaCo3	1	4.00

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12366	Date Analyzed:	2004-08-30	Analyzed By:	JG
Prep Batch:	10921	Date Prepared:	2004-08-30	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		2500	mg/L as CaCo3	1	4.00
Total Alkalinity		2500	mg/L as CaCo3	1	4.00

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	12366	Date Analyzed:	2004-08-30	Analyzed By:	JG
Prep Batch:	10921	Date Prepared:	2004-08-30	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		2510	mg/L as CaCo3	1	4.00
Total Alkalinity		2510	mg/L as CaCo3	1	4.00

Method Blank (1) QC Batch: 12019

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 12247

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 12366

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Duplicate (1) QC Batch: 12019

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Bicarbonate Alkalinity	588	588	mg/L as CaCo3	1	0	6.3
Total Alkalinity	588	588	mg/L as CaCo3	1	0	6.3

Duplicate (1) QC Batch: 12247

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Bicarbonate Alkalinity	192	194	mg/L as CaCo3	1	1	6.3
Total Alkalinity	192	194	mg/L as CaCo3	1	1	6.3

Duplicate (1) QC Batch: 12366

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Bicarbonate Alkalinity	1780	1760	mg/L as CaCo3	1	1	6.3
Total Alkalinity	1780	1760	mg/L as CaCo3	1	1	6.3

Standard (ICV-1) QC Batch: 12019

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 105	2004-08-10

Standard (CCV-1) QC Batch: 12019

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 105	2004-08-10

Standard (ICV-1) QC Batch: 12247

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	238	95	90 - 105	2004-08-23

Standard (CCV-1) QC Batch: 12247

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 105	2004-08-23

Standard (ICV-1) QC Batch: 12366

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	242	97	90 - 105	2004-08-30

Standard (CCV-1) QC Batch: 12366

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	234	94	90 - 105	2004-08-30

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 15, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11965	Date Analyzed:	2004-08-13	Analyzed By:	WB
Prep Batch:	10573	Date Prepared:	2004-08-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1	mg/L	1	1.00

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11965	Date Analyzed:	2004-08-13	Analyzed By:	WB
Prep Batch:	10573	Date Prepared:	2004-08-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1	mg/L	1	1.00

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11965	Date Analyzed:	2004-08-13	Analyzed By:	WB
Prep Batch:	10573	Date Prepared:	2004-08-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1	mg/L	1	1.00

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11965	Date Analyzed:	2004-08-13	Analyzed By:	WB
Prep Batch:	10573	Date Prepared:	2004-08-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1	mg/L	1	1.00

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11965	Date Analyzed:	2004-08-13	Analyzed By:	WB
Prep Batch:	10573	Date Prepared:	2004-08-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1	mg/L	1	1.00

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	12074	Date Analyzed:	2004-08-16	Analyzed By:	WB
Prep Batch:	10669	Date Prepared:	2004-08-16	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.0	mg/L	1	1.00

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	12074	Date Analyzed:	2004-08-16	Analyzed By:	WB
Prep Batch:	10669	Date Prepared:	2004-08-16	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		1.40	mg/L	1	1.00

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	12074	Date Analyzed:	2004-08-16	Analyzed By:	WB
Prep Batch:	10669	Date Prepared:	2004-08-16	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		1.06	mg/L	1	1.00

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	12145	Date Analyzed:	2004-08-20	Analyzed By:	WB
Prep Batch:	10726	Date Prepared:	2004-08-20	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		1.06	mg/L	1	1.00

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	12145	Date Analyzed:	2004-08-20	Analyzed By:	WB

Prep Batch: 10726 Date Prepared: 2004-08-20 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.0	mg/L	1	1.00

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis: Ammonia Analytical Method: SM 4500-NH3 B,C Prep Method: N/A
QC Batch: 12147 Date Analyzed: 2004-08-20 Analyzed By: WB
Prep Batch: 10727 Date Prepared: 2004-08-20 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.0	mg/L	1	1.00

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis: Ammonia Analytical Method: SM 4500-NH3 B,C Prep Method: N/A
QC Batch: 12147 Date Analyzed: 2004-08-20 Analyzed By: WB
Prep Batch: 10727 Date Prepared: 2004-08-20 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.0	mg/L	1	1.00

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis: Ammonia Analytical Method: SM 4500-NH3 B,C Prep Method: N/A
QC Batch: 12147 Date Analyzed: 2004-08-20 Analyzed By: WB
Prep Batch: 10727 Date Prepared: 2004-08-20 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.0	mg/L	1	1.00

Method Blank (1) QC Batch: 11965

Parameter	Flag	Result	Units	RL
Ammonia-N		< 1	mg/L	1

Method Blank (1) QC Batch: 12074

Parameter	Flag	Result	Units	RL
Ammonia-N		< 1.0	mg/L	1

Method Blank (1) QC Batch: 12145

Parameter	Flag	Result	Units	RL
Ammonia-N		< 1.0	mg/L	1

Method Blank (1) QC Batch: 12147

Parameter	Flag	Result	Units	RL
Ammonia-N		< 1.0	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 11965

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.70	4.54	mg/L	1	5.00	<0.318	94	5	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12074

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.93	4.98	mg/L	1	5.00	<0.318	99	1	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12145

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.76	4.65	mg/L	1	5.00	<0.318	95	2	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12147

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.65	4.76	mg/L	1	5.00	<0.318	93	2	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11965

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.76	4.82	mg/L	1	5.00	<0.318	95	1	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12074

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	5.26	5.26	mg/L	1	5.00	1.4	77	0	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12145

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.65	4.82	mg/L	1	5.00	<0.318	93	4	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12147

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N [1]	58.8	60.2	mg/L	1	5.00	54	96	2	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11965

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.76	95	85 - 115	2004-08-13

Standard (CCV-1) QC Batch: 11965

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.87	97	85 - 115	2004-08-13

Standard (ICV-1) QC Batch: 12074

[1] Matrix spike difficulties.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.59	92	85 - 115	2004-08-16

Standard (CCV-1) QC Batch: 12074

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.65	93	85 - 115	2004-08-16

Standard (ICV-1) QC Batch: 12145

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.76	95	85 - 115	2004-08-20

Standard (CCV-1) QC Batch: 12145

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.65	93	85 - 115	2004-08-20

Standard (ICV-1) QC Batch: 12147

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.76	95	85 - 115	2004-08-20

Standard (CCV-1) QC Batch: 12147

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.59	92	85 - 115	2004-08-20

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 15, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12024	Date Analyzed:	2004-08-12	Analyzed By:	MK
Prep Batch:	10626	Date Prepared:	2004-08-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		2840	μMHOS/cm	1	0.00

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12024	Date Analyzed:	2004-08-12	Analyzed By:	MK
Prep Batch:	10626	Date Prepared:	2004-08-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		7930	μMHOS/cm	1	0.00

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12024	Date Analyzed:	2004-08-12	Analyzed By:	MK
Prep Batch:	10626	Date Prepared:	2004-08-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		15600	μMHOS/cm	1	0.00

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12024	Date Analyzed:	2004-08-12	Analyzed By:	MK
Prep Batch:	10626	Date Prepared:	2004-08-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		9060	μMHOS/cm	1	0.00

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12024	Date Analyzed:	2004-08-12	Analyzed By:	MK
Prep Batch:	10626	Date Prepared:	2004-08-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		11000	μMHOS/cm	1	0.00

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12024	Date Analyzed:	2004-08-12	Analyzed By:	MK
Prep Batch:	10626	Date Prepared:	2004-08-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		10400	μMHOS/cm	1	0.00

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12024	Date Analyzed:	2004-08-12	Analyzed By:	MK
Prep Batch:	10626	Date Prepared:	2004-08-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		12400	μMHOS/cm	1	0.00

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12024	Date Analyzed:	2004-08-12	Analyzed By:	MK
Prep Batch:	10626	Date Prepared:	2004-08-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		10000	μMHOS/cm	1	0.00

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12251	Date Analyzed:	2004-08-25	Analyzed By:	JR
Prep Batch:	10829	Date Prepared:	2004-08-25	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		8940	μMHOS/cm	1	0.00

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	12251	Date Analyzed:	2004-08-25	Analyzed By:	JR

Prep Batch: 10829 Date Prepared: 2004-08-25 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		9150	μMHOS/cm	1	0.00

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis: Conductivity Analytical Method: SM 2510B Prep Method: N/A
QC Batch: 12251 Date Analyzed: 2004-08-25 Analyzed By: JR
Prep Batch: 10829 Date Prepared: 2004-08-25 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		10100	μMHOS/cm	1	0.00

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis: Conductivity Analytical Method: SM 2510B Prep Method: N/A
QC Batch: 12251 Date Analyzed: 2004-08-25 Analyzed By: JR
Prep Batch: 10829 Date Prepared: 2004-08-25 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		9370	μMHOS/cm	1	0.00

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis: Conductivity Analytical Method: SM 2510B Prep Method: N/A
QC Batch: 12251 Date Analyzed: 2004-08-25 Analyzed By: JR
Prep Batch: 10829 Date Prepared: 2004-08-25 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		9430	μMHOS/cm	1	0.00

Method Blank (1) QC Batch: 12024

Parameter	Flag	Result	Units	RL
Specific Conductance		< 1.00	μMHOS/cm	

Method Blank (1) QC Batch: 12251

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Duplicate (1) QC Batch: 12024

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	18300	18300	μMHOS/cm	1	0	6.7

Duplicate (1) QC Batch: 12251

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	9110	9150	μMHOS/cm	1	0	6.7

Standard (ICV-1) QC Batch: 12024

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1400	99	90 - 110	2004-08-12

Standard (CCV-1) QC Batch: 12024

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1400	99	90 - 110	2004-08-12

Standard (ICV-1) QC Batch: 12251

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1390	99	90 - 110	2004-08-25

Standard (CCV-1) QC Batch: 12251

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1380	98	90 - 110	2004-08-25

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 16, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	12036	Date Analyzed:	2004-08-10	Analyzed By:	JR
Prep Batch:	10635	Date Prepared:	2004-08-10	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	12041	Date Analyzed:	2004-08-11	Analyzed By:	JR
Prep Batch:	10641	Date Prepared:	2004-08-11	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	12041	Date Analyzed:	2004-08-11	Analyzed By:	JR
Prep Batch:	10641	Date Prepared:	2004-08-11	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.370	mg/L	1	0.0100

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	12042	Date Analyzed:	2004-08-12	Analyzed By:	JR
Prep Batch:	10642	Date Prepared:	2004-08-12	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	12042	Date Analyzed:	2004-08-12	Analyzed By:	JR
Prep Batch:	10642	Date Prepared:	2004-08-12	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	12043	Date Analyzed:	2004-08-13	Analyzed By:	JR
Prep Batch:	10644	Date Prepared:	2004-08-13	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0530	mg/L	1	0.0100

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	12043	Date Analyzed:	2004-08-13	Analyzed By:	JR
Prep Batch:	10644	Date Prepared:	2004-08-13	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0637	mg/L	1	0.0100

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	12043	Date Analyzed:	2004-08-13	Analyzed By:	JR
Prep Batch:	10644	Date Prepared:	2004-08-13	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	12279	Date Analyzed:	2004-08-18	Analyzed By:	JR
Prep Batch:	10823	Date Prepared:	2004-08-18	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	12279	Date Analyzed:	2004-08-18	Analyzed By:	JR

Prep Batch: 10823 Date Prepared: 2004-08-18 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0510	mg/L	1	0.0100

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis: Chromium, Hexavalent Analytical Method: SM 3500-Cr B Prep Method: N/A
QC Batch: 12280 Date Analyzed: 2004-08-19 Analyzed By: JR
Prep Batch: 10851 Date Prepared: 2004-08-19 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis: Chromium, Hexavalent Analytical Method: SM 3500-Cr B Prep Method: N/A
QC Batch: 12280 Date Analyzed: 2004-08-19 Analyzed By: JR
Prep Batch: 10851 Date Prepared: 2004-08-19 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0320	mg/L	1	0.0100

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis: Chromium, Hexavalent Analytical Method: SM 3500-Cr B Prep Method: N/A
QC Batch: 12280 Date Analyzed: 2004-08-19 Analyzed By: JR
Prep Batch: 10851 Date Prepared: 2004-08-19 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0570	mg/L	1	0.0100

Method Blank (1) QC Batch: 12036

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 12041

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 12042

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 12043

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 12279

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 12280

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Laboratory Control Spike (LCS-1) QC Batch: 12036

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.502	0.502	mg/L	1	0.500	<0.00500	100	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12041

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.510	0.506	mg/L	1	0.500	<0.00500	102	1	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12042

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.514	0.513	mg/L	1	0.500	<0.00500	103	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12043

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.507	0.510	mg/L	1	0.500	<0.00500	101	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12279

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.505	0.503	mg/L	1	0.500	<0.00500	101	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12280

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.515	0.501	mg/L	1	0.500	<0.00500	103	3	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12036

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.567	0.558	mg/L	1.11	0.500	<0.00555	102	2	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12041

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.561	0.552	mg/L	1.11	0.500	<0.00555	101	2	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12042

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.568	0.565	mg/L	1.11	0.500	<0.00555	102	0	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12043

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.510	0.486	mg/L	1.11	0.500	0.053	82	5	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12279

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	[1][2]	0.232	0.234	mg/L	1.11	0.500	0.051	33	1	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12280

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.511	0.498	mg/L	1.11	0.500	0.032	86	2	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 12036

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.500	100	80 - 120	2004-08-10

Standard (CCV-1) QC Batch: 12036

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.509	102	80 - 120	2004-08-10

Standard (ICV-1) QC Batch: 12041

[1]Matrix interferences occurred for the matrix spike and duplicate causing the low spike recovery. The LCS and LCSD have acceptable recoveries and can be used to determine the acceptability of the data.

[2]Matrix interferences occurred for the matrix spike and duplicate causing the low spike recovery. The LCS and LCSD have acceptable recoveries and can be used to determine the acceptability of the data.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.499	100	80 - 120	2004-08-11

Standard (CCV-1) QC Batch: 12041

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.513	103	80 - 120	2004-08-11

Standard (ICV-1) QC Batch: 12042

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.493	99	80 - 120	2004-08-12

Standard (CCV-1) QC Batch: 12042

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.502	100	80 - 120	2004-08-12

Standard (ICV-1) QC Batch: 12043

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.500	100	80 - 120	2004-08-13

Standard (CCV-1) QC Batch: 12043

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.507	101	80 - 120	2004-08-13

Standard (ICV-1) QC Batch: 12279

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.506	101	80 - 120	2004-08-18

Standard (CCV-1) QC Batch: 12279

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.507	101	80 - 120	2004-08-18

Standard (ICV-1) QC Batch: 12280

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.512	102	80 - 120	2004-08-19

Standard (CCV-1) QC Batch: 12280

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.492	98	80 - 120	2004-08-19

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 16, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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 31 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		3.49	mg/L	1	0.00500
Dissolved Barium		0.0250	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		0.0110	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		0.0210	mg/L	1	0.0125
Dissolved Iron		0.901	mg/L	1	0.0500
Dissolved Manganese		0.0670	mg/L	1	0.0250
Dissolved Molybdenum		0.439	mg/L	1	0.0500
Dissolved Nickel		1.28	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		0.153	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		10.7	mg/L	1	0.00500
Dissolved Vanadium		<0.00500	mg/L	1	0.00500
Dissolved Zinc		0.0160	mg/L	1	0.0100
Dissolved Silica		18.4	mg/L	1	0.0500

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.69	mg/L	1	0.00500

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		4.11	mg/L	1	0.00500
Dissolved Barium		0.0310	mg/L	1	0.0100

continued . . .

sample 41254 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		0.00500	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.190	mg/L	1	0.0500
Dissolved Manganese		0.260	mg/L	1	0.0250
Dissolved Molybdenum		0.118	mg/L	1	0.0500
Dissolved Nickel		0.00800	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		6.76	mg/L	1	0.00500
Dissolved Vanadium		0.0150	mg/L	1	0.00500
Dissolved Zinc		0.0100	mg/L	1	0.0100

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Si, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		39.0	mg/L	1	0.0500

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		1.97	mg/L	1	0.00500
Dissolved Barium		0.0110	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		0.446	mg/L	1	0.00500
Dissolved Copper		0.0150	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		0.0460	mg/L	1	0.0250
Dissolved Molybdenum		<0.0500	mg/L	1	0.0500
Dissolved Nickel		0.583	mg/L	1	0.00500

continued . . .

sample 41256 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		11.7	mg/L	1	0.00500
Dissolved Vanadium		0.00500	mg/L	1	0.00500
Dissolved Zinc		0.0100	mg/L	1	0.0100

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Si, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		44.9	mg/L	1	0.0500

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		6.40	mg/L	1	0.00500
Dissolved Barium		0.0250	mg/L	1	0.0100
Dissolved Beryllium		0.00400	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.196	mg/L	1	0.0500
Dissolved Manganese		0.929	mg/L	1	0.0250
Dissolved Molybdenum		0.443	mg/L	1	0.0500
Dissolved Nickel		0.0140	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		5.20	mg/L	1	0.00500
Dissolved Vanadium		0.0240	mg/L	1	0.00500
Dissolved Zinc		0.0100	mg/L	1	0.0100

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Si, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12624	Date Analyzed:	2004-09-13	Analyzed By:	RR
Prep Batch:	11159	Date Prepared:	2004-09-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		37.8	mg/L	1	0.0500

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		2.45	mg/L	1	0.00500
Dissolved Barium		0.0210	mg/L	1	0.0100
Dissolved Beryllium		0.00600	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.364	mg/L	1	0.0500
Dissolved Manganese		0.185	mg/L	1	0.0250
Dissolved Molybdenum		0.172	mg/L	1	0.0500
Dissolved Nickel		1.27	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		10.8	mg/L	1	0.00500
Dissolved Vanadium		<0.00500	mg/L	1	0.00500
Dissolved Zinc		0.0130	mg/L	1	0.0100

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Si, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12624	Date Analyzed:	2004-09-13	Analyzed By:	RR
Prep Batch:	11159	Date Prepared:	2004-09-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		25.5	mg/L	1	0.0500

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR

Prep Batch: 10683 Date Prepared: 2004-08-18 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		0.342	mg/L	1	0.00500
Dissolved Boron		8.45	mg/L	1	0.00500
Dissolved Barium		0.0820	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		0.0170	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.189	mg/L	1	0.0500
Dissolved Manganese		0.545	mg/L	1	0.0250
Dissolved Molybdenum		0.378	mg/L	1	0.0500
Dissolved Nickel		0.0680	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		4.48	mg/L	1	0.00500
Dissolved Vanadium		0.0290	mg/L	1	0.00500
Dissolved Zinc		0.0120	mg/L	1	0.0100

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis: Li, Dissolved Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 12318 Date Analyzed: 2004-08-27 Analyzed By: RR
Prep Batch: 10683 Date Prepared: 2004-08-18 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.803	mg/L	1	0.00500

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis: Si, Dissolved Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 12318 Date Analyzed: 2004-08-27 Analyzed By: RR
Prep Batch: 10683 Date Prepared: 2004-08-18 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		46.9	mg/L	1	0.0500

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis: Dissolved Metals Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 12318 Date Analyzed: 2004-08-27 Analyzed By: RR
Prep Batch: 10683 Date Prepared: 2004-08-18 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		0.381	mg/L	1	0.00500
Dissolved Boron		8.57	mg/L	1	0.00500
Dissolved Barium		0.0830	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		0.00800	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.184	mg/L	1	0.0500
Dissolved Manganese		0.551	mg/L	1	0.0250
Dissolved Molybdenum		0.337	mg/L	1	0.0500
Dissolved Nickel		0.0560	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		4.50	mg/L	1	0.00500
Dissolved Vanadium		0.0270	mg/L	1	0.00500
Dissolved Zinc		<0.0100	mg/L	1	0.0100

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.805	mg/L	1	0.00500

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Si, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12318	Date Analyzed:	2004-08-27	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		47.3	mg/L	1	0.0500

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12533	Date Analyzed:	2004-09-08	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		0.544	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		10.8	mg/L	1	0.00500
Dissolved Barium		0.0190	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		0.0530	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		0.335	mg/L	1	0.0500
Dissolved Manganese		0.941	mg/L	1	0.0250
Dissolved Molybdenum		<0.0500	mg/L	1	0.0500
Dissolved Nickel		0.0960	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		3.37	mg/L	1	0.00500
Dissolved Vanadium		0.0320	mg/L	1	0.00500
Dissolved Zinc		0.0980	mg/L	1	0.0100

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12533	Date Analyzed:	2004-09-08	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.437	mg/L	1	0.00500

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Si, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12533	Date Analyzed:	2004-09-08	Analyzed By:	RR
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		55.8	mg/L	1	0.0500

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12580	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10793	Date Prepared:	2004-08-24	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		8.26	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00500	mg/L	1	0.00500
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		2.12	mg/L	1	0.0500
Dissolved Manganese		1.29	mg/L	1	0.0250
Dissolved Molybdenum		<0.0500	mg/L	1	0.0500
Dissolved Nickel		0.0910	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		0.123	mg/L	1	0.0250
Dissolved Strontium		4.80	mg/L	1	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12580	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10793	Date Prepared:	2004-08-24	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.839	mg/L	1	0.00500

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Si, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12580	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10793	Date Prepared:	2004-08-24	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		44.1	mg/L	1	0.0500

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12580	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10793	Date Prepared:	2004-08-24	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		6.48	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00500	mg/L	1	0.00500
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		0.131	mg/L	1	0.0250
Dissolved Molybdenum		0.158	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		5.11	mg/L	1	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12580	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10793	Date Prepared:	2004-08-24	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.809	mg/L	1	0.00500

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Si, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12580	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10793	Date Prepared:	2004-08-24	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		37.6	mg/L	1	0.0500

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12579	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10892	Date Prepared:	2004-08-27	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		7.85	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		0.00500	mg/L	1	0.00250
Dissolved Cadmium		<0.00500	mg/L	1	0.00500
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		0.0340	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		0.110	mg/L	1	0.0250
Dissolved Molybdenum		0.106	mg/L	1	0.0500
Dissolved Nickel		0.0270	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		0.437	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		4.56	mg/L	1	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12579	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10892	Date Prepared:	2004-08-27	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.511	mg/L	1	0.00500

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis:	Si, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12579	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10892	Date Prepared:	2004-08-27	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		50.9	mg/L	1	0.0500

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12579	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10892	Date Prepared:	2004-08-27	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		0.475	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		8.44	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		0.0430	mg/L	1	0.00500
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		0.0890	mg/L	1	0.0125
Dissolved Iron		5.67	mg/L	1	0.0500
Dissolved Manganese		0.396	mg/L	1	0.0250
Dissolved Molybdenum		0.160	mg/L	1	0.0500
Dissolved Nickel		0.114	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		4.10	mg/L	1	0.00500
Dissolved Vanadium		0.0610	mg/L	1	0.0250
Dissolved Zinc		0.0270	mg/L	1	0.0250

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12579	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10892	Date Prepared:	2004-08-27	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.333	mg/L	1	0.00500

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	Si, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12579	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10892	Date Prepared:	2004-08-27	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		49.3	mg/L	1	0.0500

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12579	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10949	Date Prepared:	2004-08-31	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		0.466	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		8.43	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		0.0430	mg/L	1	0.00500
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		0.0870	mg/L	1	0.0125
Dissolved Iron		5.58	mg/L	1	0.0500
Dissolved Manganese		0.391	mg/L	1	0.0250
Dissolved Molybdenum		0.145	mg/L	1	0.0500
Dissolved Nickel		0.110	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		4.21	mg/L	1	0.00500
Dissolved Vanadium		0.0270	mg/L	1	0.0250
Dissolved Zinc		0.343	mg/L	1	0.0250

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12579	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10949	Date Prepared:	2004-08-31	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.343	mg/L	1	0.00500

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis:	Si, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12579	Date Analyzed:	2004-09-10	Analyzed By:	RR
Prep Batch:	10949	Date Prepared:	2004-08-31	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		48.7	mg/L	1	0.0500

Method Blank (1) QC Batch: 12318

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 12318

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.00300	mg/L	0.003
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.00500	mg/L	0.005
Dissolved Boron		<0.00500	mg/L	0.005
Dissolved Barium		<0.0100	mg/L	0.01
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00100	mg/L	0.001
Dissolved Cobalt		<0.00500	mg/L	0.005
Dissolved Chromium		<0.00500	mg/L	0.005
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.00500	mg/L	0.005
Dissolved Lead		<0.00500	mg/L	0.005
Dissolved Selenium		<0.0100	mg/L	0.01
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.00500	mg/L	0.005
Dissolved Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 12533

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 12533

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.00300	mg/L	0.003
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.00500	mg/L	0.005
Dissolved Boron		<0.00500	mg/L	0.005
Dissolved Barium		<0.0100	mg/L	0.01
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00100	mg/L	0.001
Dissolved Cobalt		<0.00500	mg/L	0.005
Dissolved Chromium		<0.00500	mg/L	0.005
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.00500	mg/L	0.005

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Dissolved Lead		<0.00500	mg/L	0.005
Dissolved Selenium		<0.0100	mg/L	0.01
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.00500	mg/L	0.005
Dissolved Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 12579

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 12579

Parameter	Flag	Result	Units	RL
Dissolved Silica		<0.0500	mg/L	0.05

Method Blank (1) QC Batch: 12579

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.0130	mg/L	0.013
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.0100	mg/L	0.01
Dissolved Boron		<0.0500	mg/L	0.05
Dissolved Barium		<0.100	mg/L	0.1
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00500	mg/L	0.005
Dissolved Cobalt		<0.0250	mg/L	0.025
Dissolved Chromium		<0.0100	mg/L	0.01
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.0250	mg/L	0.025
Dissolved Lead		<0.0100	mg/L	0.01
Dissolved Selenium		<0.0500	mg/L	0.05
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.0250	mg/L	0.025
Dissolved Zinc		<0.0250	mg/L	0.025

Method Blank (1) QC Batch: 12580

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 12580

Parameter	Flag	Result	Units	RL
Dissolved Silica		<0.0500	mg/L	0.05

Method Blank (1) QC Batch: 12580

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.0130	mg/L	0.013
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.0100	mg/L	0.01
Dissolved Boron		<0.0500	mg/L	0.05
Dissolved Barium		<0.100	mg/L	0.1
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00500	mg/L	0.005
Dissolved Cobalt		<0.0250	mg/L	0.025
Dissolved Chromium		<0.0100	mg/L	0.01
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.0250	mg/L	0.025
Dissolved Lead		<0.0100	mg/L	0.01
Dissolved Selenium		<0.0500	mg/L	0.05
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.0250	mg/L	0.025
Dissolved Zinc		<0.0250	mg/L	0.025

Method Blank (1) QC Batch: 12624

Parameter	Flag	Result	Units	RL
Dissolved Silica		<0.0500	mg/L	0.05

Laboratory Control Spike (LCS-1) QC Batch: 12318

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0490	0.0480	mg/L	1	0.0500	<0.000188	98	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12318

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silica	0.496	0.470	mg/L	1	0.500	<0.00490	99	5	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12318

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.133	0.131	mg/L	1	0.125	<0.00274	106	2	85 - 115	20
Dissolved Aluminum	0.979	0.960	mg/L	1	1.00	<0.0133	98	2	85 - 115	20
Dissolved Arsenic	0.524	0.443	mg/L	1	0.500	<0.00489	105	17	85 - 115	20
Dissolved Boron	0.0490	0.0460	mg/L	1	0.0500	<0.00544	98	6	85 - 115	20
Dissolved Barium	0.990	0.972	mg/L	1	1.00	<0.000450	99	2	85 - 114	20
Dissolved Beryllium	0.0258	0.0248	mg/L	1	0.0250	<0.000178	103	4	85 - 115	20
Dissolved Cadmium	0.257	0.253	mg/L	1	0.250	<0.00181	103	2	86 - 115	20
Dissolved Cobalt	0.271	0.275	mg/L	1	0.250	<0.00293	108	1	87 - 113	20
Dissolved Chromium	0.0970	0.0950	mg/L	1	0.100	<0.00357	97	2	85 - 115	20
Dissolved Copper	0.122	0.118	mg/L	1	0.125	<0.00127	98	3	85 - 113	20
Dissolved Iron	0.506	0.498	mg/L	1	0.500	<0.0103	101	2	85 - 115	20
Dissolved Manganese	0.260	0.258	mg/L	1	0.250	<0.000297	104	1	85 - 110	20
Dissolved Molybdenum	0.450	0.456	mg/L	1	0.500	<0.00690	90	1	85 - 115	20
Dissolved Nickel	0.245	0.268	mg/L	1	0.250	<0.000450	98	9	85 - 112	20
Dissolved Lead	0.487	0.508	mg/L	1	0.500	<0.00698	97	4	86.1 - 112	20
Dissolved Selenium	0.410	0.508	mg/L	1	0.500	<0.00556	82	21	75 - 125	20
Dissolved Tin	0.313	0.311	mg/L	1	0.300	<0.00759	104	1	85 - 115	20
Dissolved Strontium	0.0490	0.0480	mg/L	1	0.0500	<0.000281	98	2	85 - 115	20
Dissolved Vanadium	0.260	0.263	mg/L	1	0.250	<0.00105	104	1	85 - 115	20
Dissolved Zinc	0.246	0.274	mg/L	1	0.250	<0.00300	98	11	85 - 115	20
Dissolved Silica	0.496	0.470	mg/L	1	0.500	<0.00490	99	5	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12533

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0490	0.0480	mg/L	1	0.0500	<0.000188	98	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12533

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silica	0.496	0.470	mg/L	1	0.500	<0.00490	99	5	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12533

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.133	0.131	mg/L	1	0.125	<0.00274	106	2	85 - 115	20
Dissolved Aluminum	0.979	0.960	mg/L	1	1.00	<0.0133	98	2	85 - 115	20
Dissolved Arsenic	0.524	0.443	mg/L	1	0.500	<0.00489	105	17	85 - 115	20
Dissolved Boron	0.0490	0.0460	mg/L	1	0.0500	<0.00544	98	6	85 - 115	20
Dissolved Barium	0.990	0.972	mg/L	1	1.00	<0.000450	99	2	85 - 114	20
Dissolved Beryllium	0.0258	0.0248	mg/L	1	0.0250	<0.000178	103	4	85 - 115	20
Dissolved Cadmium	0.257	0.253	mg/L	1	0.250	<0.00181	103	2	86 - 115	20
Dissolved Cobalt	0.271	0.275	mg/L	1	0.250	<0.00293	108	1	87 - 113	20
Dissolved Chromium	0.0970	0.0950	mg/L	1	0.100	<0.00357	97	2	85 - 115	20
Dissolved Copper	0.122	0.118	mg/L	1	0.125	<0.00127	98	3	85 - 113	20
Dissolved Iron	0.506	0.498	mg/L	1	0.500	<0.0103	101	2	85 - 115	20
Dissolved Manganese	0.260	0.258	mg/L	1	0.250	<0.000297	104	1	85 - 110	20
Dissolved Molybdenum	0.450	0.456	mg/L	1	0.500	<0.00690	90	1	85 - 115	20
Dissolved Nickel	0.245	0.268	mg/L	1	0.250	<0.000450	98	9	85 - 112	20
Dissolved Lead	0.487	0.508	mg/L	1	0.500	<0.00698	97	4	86.1 - 112	20
Dissolved Selenium	0.410	0.508	mg/L	1	0.500	<0.00556	82	21	75 - 125	20
Dissolved Tin	0.313	0.311	mg/L	1	0.300	<0.00759	104	1	85 - 115	20
Dissolved Strontium	0.0490	0.0480	mg/L	1	0.0500	<0.000281	98	2	85 - 115	20
Dissolved Vanadium	0.260	0.263	mg/L	1	0.250	<0.00105	104	1	85 - 115	20
Dissolved Zinc	0.246	0.274	mg/L	1	0.250	<0.00300	98	11	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12579

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0500	0.0510	mg/L	1	0.0500	<0.00197	100	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12579

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silica	0.555	0.560	mg/L	1	0.500	<0.00632	111	1	85 - 115	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12579

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.124	0.126	mg/L	1	0.125	<0.000199	99	2	85 - 115	20
Dissolved Aluminum	1.01	0.955	mg/L	1	1.00	<0.00984	101	6	85 - 115	20
Dissolved Arsenic	0.466	0.472	mg/L	1	0.500	<0.00860	93	1	85 - 115	20
Dissolved Boron	0.0480	0.0480	mg/L	1	0.0500	<0.00366	96	0	85 - 115	20
Dissolved Barium	1.02	1.03	mg/L	1	1.00	<0.000984	102	1	85 - 115	20
Dissolved Beryllium	0.0233	0.0240	mg/L	1	0.0250	<0.000532	93	3	85 - 115	20
Dissolved Cadmium	0.241	0.244	mg/L	1	0.250	<0.000577	96	1	85 - 115	20
Dissolved Cobalt	0.251	0.254	mg/L	1	0.250	<0.000630	100	1	85 - 115	20
Dissolved Chromium	0.102	0.102	mg/L	1	0.100	<0.000437	102	0	85 - 115	20
Dissolved Copper	0.123	0.125	mg/L	1	0.125	<0.00164	98	2	85 - 115	20
Dissolved Iron	0.492	0.496	mg/L	1	0.500	<0.00281	98	1	85 - 115	20
Dissolved Manganese	0.248	0.250	mg/L	1	0.250	<0.00296	99	1	85 - 115	20
Dissolved Molybdenum	0.501	0.508	mg/L	1	0.500	<0.00118	100	1	85 - 115	20
Dissolved Nickel	0.244	0.247	mg/L	1	0.250	<0.00126	98	1	85 - 115	20
Dissolved Lead	0.501	0.505	mg/L	1	0.500	<0.00310	100	1	85 - 115	20
Dissolved Selenium	0.444	0.452	mg/L	1	0.500	<0.00370	89	2	75 - 125	20
Dissolved Tin	0.301	0.306	mg/L	1	0.300	<0.00238	100	2	85 - 115	20
Dissolved Strontium	0.0510	0.0520	mg/L	1	0.0500	<0.000457	102	2	85 - 115	20
Dissolved Vanadium	0.250	0.253	mg/L	1	0.250	<0.000651	100	1	85 - 115	20
Dissolved Zinc	0.249	0.249	mg/L	1	0.250	<0.00151	100	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12580

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0510	0.0510	mg/L	1	0.0500	<0.00197	102	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12580

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silica	0.550	0.545	mg/L	1	0.500	<0.00632	110	1	85 - 115	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12580

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.125	0.124	mg/L	1	0.125	<0.000199	100	1	85 - 115	20
Dissolved Aluminum	0.976	0.973	mg/L	1	1.00	<0.00984	98	0	85 - 115	20
Dissolved Arsenic	0.452	0.454	mg/L	1	0.500	<0.00860	90	0	85 - 115	20
Dissolved Boron	0.0470	0.0480	mg/L	1	0.0500	<0.00366	94	2	85 - 115	20
Dissolved Barium	1.00	1.00	mg/L	1	1.00	<0.000984	100	0	85 - 115	20
Dissolved Beryllium	0.0270	0.0280	mg/L	1	0.0250	<0.000532	108	4	85 - 115	20
Dissolved Cadmium	0.242	0.242	mg/L	1	0.250	<0.000577	97	0	85 - 115	20
Dissolved Cobalt	0.253	0.254	mg/L	1	0.250	<0.000630	101	0	85 - 115	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Chromium	0.106	0.106	mg/L	1	0.100	<0.000437	106	0	85 - 115	20
Dissolved Copper	0.129	0.129	mg/L	1	0.125	<0.00164	103	0	85 - 115	20
Dissolved Iron	0.494	0.494	mg/L	1	0.500	<0.00281	99	0	85 - 115	20
Dissolved Manganese	0.249	0.249	mg/L	1	0.250	<0.00296	100	0	85 - 115	20
Dissolved Molybdenum	0.501	0.501	mg/L	1	0.500	<0.00118	100	0	85 - 115	20
Dissolved Nickel	0.247	0.246	mg/L	1	0.250	<0.00126	99	0	85 - 115	20
Dissolved Lead	0.498	0.498	mg/L	1	0.500	<0.00310	100	0	85 - 115	20
Dissolved Selenium	0.450	0.449	mg/L	1	0.500	<0.00370	90	0	75 - 125	20
Dissolved Tin	0.307	0.317	mg/L	1	0.300	<0.00238	102	3	85 - 115	20
Dissolved Strontium	0.0510	0.0510	mg/L	1	0.0500	<0.000457	102	0	85 - 115	20
Dissolved Vanadium	0.256	0.255	mg/L	1	0.250	<0.000651	102	0	85 - 115	20
Dissolved Zinc	0.255	0.258	mg/L	1	0.250	<0.00151	102	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12624

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silica	0.562	0.562	mg/L	1	0.500	<0.00490	112	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12318

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	[12]	1.34	1.33	mg/L	1	0.0500	1.15	380	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12318

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silica	[34]	35.4	34.8	mg/L	1	0.500	32.7	540	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12318

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	[56]	0.198	0.194	mg/L	1	0.125	<0.00274	158	2	75 - 125	20

continued . . .

[1]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[2]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[3]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[4]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[5]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[6]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Aluminum	[7][8]	2.02	2.02	mg/L	1	1.00	<0.0133	202	0	75 - 125	20
Dissolved Arsenic		0.572	0.482	mg/L	1	0.500	<0.00489	114	17	75 - 125	20
Dissolved Boron	[9][10]	6.94	6.80	mg/L	1	0.0500	6.54	800	2	75 - 125	20
Dissolved Barium	[11][12]	1.33	1.30	mg/L	1	1.00	0.013	132	2	75 - 125	20
Dissolved Beryllium	[13]	0.0278	0.0320	mg/L	1	0.0250	<0.000178	111	14	75 - 125	20
Dissolved Cadmium		0.259	0.254	mg/L	1	0.250	<0.00181	104	2	75 - 125	20
Dissolved Cobalt		0.308	0.306	mg/L	1	0.250	<0.00293	123	1	75 - 125	20
Dissolved Chromium		0.401	0.397	mg/L	1	0.100	0.276	125	1	75 - 125	20
Dissolved Copper	[14][15]	0.243	0.238	mg/L	1	0.125	0.017	181	2	75 - 125	20
Dissolved Iron		0.535	0.526	mg/L	1	0.500	<0.0103	107	2	75 - 125	20
Dissolved Manganese		0.275	0.272	mg/L	1	0.250	<0.000297	110	1	75 - 125	20
Dissolved Molybdenum		1.44	1.42	mg/L	1	0.500	0.873	113	1	75 - 125	20
Dissolved Nickel		0.305	0.308	mg/L	1	0.250	<0.000450	122	1	75 - 125	20
Dissolved Lead	[16][17]	0.683	0.631	mg/L	1	0.500	<0.00698	137	8	75 - 125	20
Dissolved Selenium		0.527	0.508	mg/L	1	0.500	<0.00556	105	4	75 - 125	20
Dissolved Tin		0.253	0.283	mg/L	1	0.300	<0.00759	84	11	75 - 125	20
Dissolved Strontium	[18][19]	7.05	6.91	mg/L	1	0.0500	6.75	600	2	75 - 125	20
Dissolved Vanadium		0.305	0.299	mg/L	1	0.250	0.036	108	2	75 - 125	20
Dissolved Zinc		0.310	0.309	mg/L	1	0.250	0.016	118	0	75 - 125	20
Dissolved Silica	[20][21]	35.4	34.8	mg/L	1	0.500	32.7	540	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12533

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	[22][23]	1.34	1.33	mg/L	1	0.0500	1.15	380	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12533

continued . . .

[7]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[8]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[9]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[10]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control..
[11]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[12]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[13]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[14]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[15]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[16]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[17]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[18]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[19]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[20]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[21]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[22]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[23]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silica	[24][25]	35.4	34.8	mg/L	1	0.500	32.7	540	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12533

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	[26][27]	0.198	0.194	mg/L	1	0.125	<0.00274	158	2	75 - 125	20
Dissolved Aluminum	[28][29]	2.02	2.02	mg/L	1	1.00	<0.0133	202	0	75 - 125	20
Dissolved Arsenic		0.572	0.482	mg/L	1	0.500	<0.00489	114	17	75 - 125	20
Dissolved Boron	[30][31]	6.94	6.80	mg/L	1	0.0500	6.54	800	2	75 - 125	20
Dissolved Barium	[32][33]	1.33	1.30	mg/L	1	1.00	0.013	132	2	75 - 125	20
Dissolved Beryllium	[34]	0.0278	0.0320	mg/L	1	0.0250	<0.000178	111	14	75 - 125	20
Dissolved Cadmium		0.259	0.254	mg/L	1	0.250	<0.00181	104	2	75 - 125	20
Dissolved Cobalt		0.308	0.306	mg/L	1	0.250	<0.00293	123	1	75 - 125	20
Dissolved Chromium		0.401	0.397	mg/L	1	0.100	0.276	125	1	75 - 125	20
Dissolved Copper	[35][36]	0.243	0.238	mg/L	1	0.125	0.017	181	2	75 - 125	20
Dissolved Iron		0.535	0.526	mg/L	1	0.500	<0.0103	107	2	75 - 125	20
Dissolved Manganese		0.275	0.272	mg/L	1	0.250	<0.000297	110	1	75 - 125	20
Dissolved Molybdenum		1.44	1.42	mg/L	1	0.500	0.873	113	1	75 - 125	20
Dissolved Nickel		0.305	0.308	mg/L	1	0.250	<0.000450	122	1	75 - 125	20
Dissolved Lead	[37][38]	0.683	0.631	mg/L	1	0.500	<0.00698	137	8	75 - 125	20
Dissolved Selenium		0.527	0.508	mg/L	1	0.500	<0.00556	105	4	75 - 125	20
Dissolved Tin		0.253	0.283	mg/L	1	0.300	<0.00759	84	11	75 - 125	20
Dissolved Strontium	[39][40]	7.05	6.91	mg/L	1	0.0500	6.75	600	2	75 - 125	20
Dissolved Vanadium		0.305	0.299	mg/L	1	0.250	0.036	108	2	75 - 125	20
Dissolved Zinc		0.310	0.309	mg/L	1	0.250	0.016	118	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12579

[24]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[25]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[26]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[27]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[28]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[29]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[30]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[31]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[32]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[33]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[34]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[35]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[36]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[37]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[38]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[39]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[40]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	[41][42]	0.613	0.615	mg/L	1	0.0500	0.511	204	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12579

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silica	[43][44]	53.0	52.6	mg/L	1	0.500	50.9	420	1	75 - 125	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12579

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver		0.128	0.131	mg/L	1	0.125	<0.000199	102	2	75 - 125	20
Dissolved Aluminum		1.21	1.18	mg/L	1	1.00	<0.00984	121	2	75 - 125	20
Dissolved Arsenic		0.475	0.482	mg/L	1	0.500	<0.00860	95	1	75 - 125	20
Dissolved Boron	[45][46]	8.18	8.23	mg/L	1	0.0500	7.85	660	1	75 - 125	20
Dissolved Barium		0.873	0.882	mg/L	1	1.00	<0.000984	87	1	75 - 125	20
Dissolved Beryllium		0.0260	0.0256	mg/L	1	0.0250	<0.000532	104	2	75 - 125	20
Dissolved Cadmium		0.203	0.210	mg/L	1	0.250	<0.000577	81	3	75 - 125	20
Dissolved Cobalt		0.213	0.215	mg/L	1	0.250	<0.000630	85	1	75 - 125	20
Dissolved Chromium		0.0950	0.0960	mg/L	1	0.100	<0.000437	95	1	75 - 125	20
Dissolved Copper		0.118	0.119	mg/L	1	0.125	<0.00164	94	1	75 - 125	20
Dissolved Iron		0.428	0.436	mg/L	1	0.500	<0.00281	86	2	75 - 125	20
Dissolved Manganese		0.323	0.328	mg/L	1	0.250	0.11	85	2	75 - 125	20
Dissolved Molybdenum	[47][48]	0.232	0.238	mg/L	1	0.500	<0.00118	46	2	75 - 125	20
Dissolved Nickel		0.226	0.230	mg/L	1	0.250	0.027	80	2	75 - 125	20
Dissolved Lead		0.517	0.520	mg/L	1	0.500	<0.00310	103	0	75 - 125	20
Dissolved Selenium		0.437	0.441	mg/L	1	0.500	<0.00370	87	1	75 - 125	20
Dissolved Tin		0.228	0.239	mg/L	1	0.300	<0.00238	76	5	75 - 125	20
Dissolved Strontium	[49][50]	4.83	4.92	mg/L	1	0.0500	4.56	540	2	75 - 125	20
Dissolved Vanadium		0.242	0.245	mg/L	1	0.250	<0.000651	97	1	75 - 125	20
Dissolved Zinc		0.271	0.268	mg/L	1	0.250	<0.00151	108	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12580

[41] MS recovery invalid due to matrix effects. LCS demonstrates process under control.
[42] MS recovery invalid due to matrix effects. LCS demonstrates process under control.
[43] MS recovery invalid due to matrix effects. LCS demonstrates process under control.
[44] MS recovery invalid due to matrix effects. LCS demonstrates process under control.
[45] MS recovery invalid due to matrix effects. LCS demonstrates process under control.
[46] MS recovery invalid due to matrix effects. LCS demonstrates process under control.
[47] MS recovery invalid due to matrix effects. LCS demonstrates process under control.
[48] MS recovery invalid due to matrix effects. LCS demonstrates process under control.
[49] MS recovery invalid due to matrix effects. LCS demonstrates process under control.
[50] MS recovery invalid due to matrix effects. LCS demonstrates process under control.

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	[51][52]	0.864	0.934	mg/L	1	0.0500	0.839	50	8	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12580

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silica	[53]	44.5	45.6	mg/L	1	0.500	44.1	80	2	75 - 125	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12580

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver		0.144	0.142	mg/L	1	0.125	<0.000199	115	1	75 - 125	20
Dissolved Aluminum		1.23	1.22	mg/L	1	1.00	<0.00984	123	1	75 - 125	20
Dissolved Arsenic		0.584	0.585	mg/L	1	0.500	<0.00860	117	0	75 - 125	20
Dissolved Boron		0.0520	0.0500	mg/L	1	0.0500	<0.00366	104	4	75 - 125	20
Dissolved Barium		1.16	1.12	mg/L	1	1.00	0.035	112	4	75 - 125	20
Dissolved Beryllium		0.0230	0.0230	mg/L	1	0.0250	<0.000532	92	0	75 - 125	20
Dissolved Cadmium		0.230	0.239	mg/L	1	0.250	<0.000577	92	4	75 - 125	20
Dissolved Cobalt		0.235	0.239	mg/L	1	0.250	0.016	88	2	75 - 125	20
Dissolved Chromium	[54][55]	0.0230	0.0350	mg/L	1	0.100	<0.000437	23	41	75 - 125	20
Dissolved Copper		0.128	0.132	mg/L	1	0.125	<0.00164	102	3	75 - 125	20
Dissolved Iron	[56]	2.54	2.46	mg/L	1	0.500	2.12	84	3	75 - 125	20
Dissolved Manganese		0.247	0.251	mg/L	1	0.250	<0.00296	99	2	75 - 125	20
Dissolved Molybdenum		0.489	0.490	mg/L	1	0.500	<0.00118	98	0	75 - 125	20
Dissolved Nickel	[57][58]	0.249	0.271	mg/L	1	0.250	0.091	63	8	75 - 125	20
Dissolved Lead		0.451	0.469	mg/L	1	0.500	<0.00310	90	4	75 - 125	20
Dissolved Selenium		0.525	0.525	mg/L	1	0.500	<0.00370	105	0	75 - 125	20
Dissolved Tin	[59]	0.749	0.449	mg/L	1	0.300	0.123	209	50	75 - 125	20
Dissolved Strontium	[60][61]	4.92	4.94	mg/L	1	0.0500	4.8	240	0	75 - 125	20
Dissolved Vanadium	[62]	0.310	0.317	mg/L	1	0.250	<0.000651	124	2	75 - 125	20
Dissolved Zinc		0.282	0.292	mg/L	1	0.250	<0.00151	113	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12624

[51]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[52]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[53]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[54]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[55]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[56]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[57]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[58]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[59]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[60]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[61]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[62]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silica	0.472	0.546	mg/L	1	0.500	<0.00490	94	14	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 12318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.999	100	90 - 110	2004-08-27

Standard (ICV-1) QC Batch: 12318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silica		mg/L	5.00	4.95	99	95 - 105	2004-08-27

Standard (ICV-1) QC Batch: 12318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.127	102	90 - 110	2004-08-27
Dissolved Aluminum		mg/L	1.00	0.992	99	90 - 110	2004-08-27
Dissolved Arsenic		mg/L	1.00	0.996	100	90 - 110	2004-08-27
Dissolved Boron		mg/L	1.00	0.990	99	90 - 110	2004-08-27
Dissolved Barium		mg/L	1.00	1.01	101	90 - 110	2004-08-27
Dissolved Beryllium		mg/L	1.00	0.998	100	90 - 110	2004-08-27
Dissolved Cadmium		mg/L	1.00	1.01	101	95 - 105	2004-08-27
Dissolved Cobalt		mg/L	1.00	1.00	100	90 - 110	2004-08-27
Dissolved Chromium		mg/L	1.00	1.05	105	90 - 110	2004-08-27
Dissolved Copper		mg/L	1.00	0.999	100	90 - 110	2004-08-27
Dissolved Iron		mg/L	1.00	1.02	102	90 - 110	2004-08-27
Dissolved Manganese		mg/L	1.00	1.01	101	90 - 110	2004-08-27
Dissolved Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-08-27
Dissolved Nickel		mg/L	1.00	1.01	101	90 - 110	2004-08-27
Dissolved Lead		mg/L	1.00	1.04	104	90 - 110	2004-08-27
Dissolved Selenium		mg/L	1.00	0.961	96	95 - 105	2004-08-27
Dissolved Tin		mg/L	1.00	1.05	105	90 - 110	2004-08-27
Dissolved Strontium		mg/L	1.00	1.02	102	95 - 105	2004-08-27
Dissolved Vanadium		mg/L	1.00	0.999	100	95 - 105	2004-08-27
Dissolved Zinc		mg/L	1.00	0.980	98	90 - 110	2004-08-27
Dissolved Silica		mg/L	5.00	4.95	99	95 - 105	2004-08-27

Standard (CCV-1) QC Batch: 12318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.00	100	90 - 110	2004-08-27

Standard (CCV-1) QC Batch: 12318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silica		mg/L	5.00	5.26	105	90 - 110	2004-08-27

Standard (CCV-1) QC Batch: 12318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.126	101	90 - 110	2004-08-27
Dissolved Aluminum		mg/L	1.00	0.984	98	90 - 110	2004-08-27
Dissolved Arsenic		mg/L	1.00	0.986	99	90 - 110	2004-08-27
Dissolved Boron		mg/L	1.00	1.03	103	90 - 110	2004-08-27
Dissolved Barium		mg/L	1.00	0.973	97	90 - 110	2004-08-27
Dissolved Beryllium		mg/L	1.00	1.02	102	90 - 110	2004-08-27
Dissolved Cadmium		mg/L	1.00	0.990	99	90 - 110	2004-08-27
Dissolved Cobalt		mg/L	1.00	0.988	99	90 - 110	2004-08-27
Dissolved Chromium		mg/L	1.00	1.02	102	90 - 110	2004-08-27
Dissolved Copper		mg/L	1.00	1.01	101	90 - 110	2004-08-27
Dissolved Iron		mg/L	1.00	1.00	100	90 - 110	2004-08-27
Dissolved Manganese		mg/L	1.00	0.983	98	90 - 110	2004-08-27
Dissolved Molybdenum		mg/L	1.00	0.946	95	90 - 110	2004-08-27
Dissolved Nickel		mg/L	1.00	0.973	97	90 - 110	2004-08-27
Dissolved Lead		mg/L	1.00	0.969	97	90 - 110	2004-08-27
Dissolved Selenium		mg/L	1.00	0.997	100	90 - 110	2004-08-27
Dissolved Tin		mg/L	1.00	0.942	94	90 - 110	2004-08-27
Dissolved Strontium		mg/L	1.00	0.986	99	90 - 110	2004-08-27
Dissolved Vanadium		mg/L	1.00	0.975	98	90 - 110	2004-08-27
Dissolved Zinc		mg/L	1.00	0.973	97	90 - 110	2004-08-27
Dissolved Silica		mg/L	5.00	5.26	105	90 - 110	2004-08-27

Standard (ICV-1) QC Batch: 12533

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.999	100	90 - 110	2004-09-08

Standard (ICV-1) QC Batch: 12533

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silica		mg/L	5.00	4.95	99	95 - 105	2004-09-08

Standard (ICV-1) QC Batch: 12533

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.127	102	90 - 110	2004-09-08
Dissolved Aluminum		mg/L	1.00	0.992	99	90 - 110	2004-09-08
Dissolved Arsenic		mg/L	1.00	0.996	100	90 - 110	2004-09-08
Dissolved Boron		mg/L	1.00	0.990	99	90 - 110	2004-09-08
Dissolved Barium		mg/L	1.00	1.01	101	90 - 110	2004-09-08
Dissolved Beryllium		mg/L	1.00	0.998	100	90 - 110	2004-09-08
Dissolved Cadmium		mg/L	1.00	1.01	101	95 - 105	2004-09-08
Dissolved Cobalt		mg/L	1.00	1.00	100	90 - 110	2004-09-08
Dissolved Chromium		mg/L	1.00	1.05	105	90 - 110	2004-09-08
Dissolved Copper		mg/L	1.00	0.999	100	90 - 110	2004-09-08
Dissolved Iron		mg/L	1.00	1.02	102	90 - 110	2004-09-08
Dissolved Manganese		mg/L	1.00	1.01	101	90 - 110	2004-09-08
Dissolved Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-09-08
Dissolved Nickel		mg/L	1.00	1.01	101	90 - 110	2004-09-08
Dissolved Lead		mg/L	1.00	1.04	104	90 - 110	2004-09-08
Dissolved Selenium		mg/L	1.00	0.961	96	95 - 105	2004-09-08
Dissolved Tin		mg/L	1.00	1.05	105	90 - 110	2004-09-08
Dissolved Strontium		mg/L	1.00	1.02	102	95 - 105	2004-09-08
Dissolved Vanadium		mg/L	1.00	0.999	100	95 - 105	2004-09-08
Dissolved Zinc		mg/L	1.00	0.980	98	90 - 110	2004-09-08

Standard (CCV-1) QC Batch: 12533

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.00	100	90 - 110	2004-09-08

Standard (CCV-1) QC Batch: 12533

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silica		mg/L	5.00	5.21	104	90 - 110	2004-09-08

Standard (CCV-1) QC Batch: 12533

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.126	101	90 - 110	2004-09-08
Dissolved Aluminum		mg/L	1.00	0.984	98	90 - 110	2004-09-08
Dissolved Arsenic		mg/L	1.00	0.986	99	90 - 110	2004-09-08
Dissolved Boron		mg/L	1.00	1.03	103	90 - 110	2004-09-08
Dissolved Barium		mg/L	1.00	0.973	97	90 - 110	2004-09-08
Dissolved Beryllium		mg/L	1.00	1.02	102	90 - 110	2004-09-08
Dissolved Cadmium		mg/L	1.00	0.990	99	90 - 110	2004-09-08
Dissolved Cobalt		mg/L	1.00	0.988	99	90 - 110	2004-09-08
Dissolved Chromium		mg/L	1.00	1.02	102	90 - 110	2004-09-08

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Copper		mg/L	1.00	1.01	101	90 - 110	2004-09-08
Dissolved Iron		mg/L	1.00	1.00	100	90 - 110	2004-09-08
Dissolved Manganese		mg/L	1.00	0.983	98	90 - 110	2004-09-08
Dissolved Molybdenum		mg/L	1.00	0.946	95	90 - 110	2004-09-08
Dissolved Nickel		mg/L	1.00	0.973	97	90 - 110	2004-09-08
Dissolved Lead		mg/L	1.00	0.969	97	90 - 110	2004-09-08
Dissolved Selenium		mg/L	1.00	0.997	100	90 - 110	2004-09-08
Dissolved Tin		mg/L	1.00	0.942	94	90 - 110	2004-09-08
Dissolved Strontium		mg/L	1.00	0.986	99	90 - 110	2004-09-08
Dissolved Vanadium		mg/L	1.00	0.975	98	90 - 110	2004-09-08
Dissolved Zinc		mg/L	1.00	0.973	97	90 - 110	2004-09-08

Standard (ICV-1) QC Batch: 12579

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.05	105	90 - 110	2004-09-10

Standard (ICV-1) QC Batch: 12579

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silica		mg/L	5.00	4.94	99	95 - 105	2004-09-10

Standard (ICV-1) QC Batch: 12579

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.124	99	90 - 110	2004-09-10
Dissolved Aluminum		mg/L	1.00	0.999	100	90 - 110	2004-09-10
Dissolved Arsenic		mg/L	1.00	0.993	99	90 - 110	2004-09-10
Dissolved Boron		mg/L	1.00	1.04	104	90 - 110	2004-09-10
Dissolved Barium		mg/L	1.00	0.997	100	90 - 110	2004-09-10
Dissolved Beryllium		mg/L	1.00	1.00	100	90 - 110	2004-09-10
Dissolved Cadmium		mg/L	1.00	0.997	100	90 - 110	2004-09-10
Dissolved Cobalt		mg/L	1.00	0.997	100	90 - 110	2004-09-10
Dissolved Chromium		mg/L	1.00	0.996	100	90 - 110	2004-09-10
Dissolved Copper		mg/L	1.00	0.998	100	90 - 110	2004-09-10
Dissolved Iron		mg/L	1.00	0.995	100	90 - 110	2004-09-10
Dissolved Manganese		mg/L	1.00	0.999	100	90 - 110	2004-09-10
Dissolved Molybdenum		mg/L	1.00	0.993	99	90 - 110	2004-09-10
Dissolved Nickel		mg/L	1.00	0.997	100	90 - 110	2004-09-10
Dissolved Lead		mg/L	1.00	0.994	99	90 - 110	2004-09-10
Dissolved Selenium		mg/L	1.00	0.997	100	90 - 110	2004-09-10
Dissolved Tin		mg/L	1.00	1.00	100	90 - 110	2004-09-10

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Strontium		mg/L	1.00	1.03	103	90 - 110	2004-09-10
Dissolved Vanadium		mg/L	1.00	0.996	100	90 - 110	2004-09-10
Dissolved Zinc		mg/L	1.00	0.995	100	90 - 110	2004-09-10

Standard (CCV-1) QC Batch: 12579

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.08	108	90 - 110	2004-09-10

Standard (CCV-1) QC Batch: 12579

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silica		mg/L	5.00	5.06	101	90 - 110	2004-09-10

Standard (CCV-1) QC Batch: 12579

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.129	103	90 - 110	2004-09-10
Dissolved Aluminum		mg/L	1.00	1.03	103	90 - 110	2004-09-10
Dissolved Arsenic		mg/L	1.00	0.995	100	90 - 110	2004-09-10
Dissolved Boron		mg/L	1.00	1.08	108	90 - 110	2004-09-10
Dissolved Barium		mg/L	1.00	1.00	100	90 - 110	2004-09-10
Dissolved Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-09-10
Dissolved Cadmium		mg/L	1.00	1.00	100	90 - 110	2004-09-10
Dissolved Cobalt		mg/L	1.00	1.00	100	90 - 110	2004-09-10
Dissolved Chromium		mg/L	1.00	1.01	101	90 - 110	2004-09-10
Dissolved Copper		mg/L	1.00	1.01	101	90 - 110	2004-09-10
Dissolved Iron		mg/L	1.00	0.997	100	90 - 110	2004-09-10
Dissolved Manganese		mg/L	1.00	1.01	101	90 - 110	2004-09-10
Dissolved Molybdenum		mg/L	1.00	1.00	100	90 - 110	2004-09-10
Dissolved Nickel		mg/L	1.00	1.00	100	90 - 110	2004-09-10
Dissolved Lead		mg/L	1.00	1.00	100	90 - 110	2004-09-10
Dissolved Selenium		mg/L	1.00	1.00	100	90 - 110	2004-09-10
Dissolved Tin		mg/L	1.00	1.02	102	90 - 110	2004-09-10
Dissolved Strontium		mg/L	1.00	1.07	107	90 - 110	2004-09-10
Dissolved Vanadium		mg/L	1.00	1.01	101	90 - 110	2004-09-10
Dissolved Zinc		mg/L	1.00	0.994	99	90 - 110	2004-09-10

Standard (ICV-1) QC Batch: 12580

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.05	105	90 - 110	2004-09-10

Standard (ICV-1) QC Batch: 12580

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silica		mg/L	5.00	4.94	99	95 - 105	2004-09-10

Standard (ICV-1) QC Batch: 12580

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.124	99	90 - 110	2004-09-10
Dissolved Aluminum		mg/L	1.00	0.999	100	90 - 110	2004-09-10
Dissolved Arsenic		mg/L	1.00	0.993	99	90 - 110	2004-09-10
Dissolved Boron		mg/L	1.00	1.04	104	90 - 110	2004-09-10
Dissolved Barium		mg/L	1.00	0.997	100	90 - 110	2004-09-10
Dissolved Beryllium		mg/L	1.00	1.00	100	90 - 110	2004-09-10
Dissolved Cadmium		mg/L	1.00	0.997	100	90 - 110	2004-09-10
Dissolved Cobalt		mg/L	1.00	0.997	100	90 - 110	2004-09-10
Dissolved Chromium		mg/L	1.00	0.996	100	90 - 110	2004-09-10
Dissolved Copper		mg/L	1.00	0.998	100	90 - 110	2004-09-10
Dissolved Iron		mg/L	1.00	0.995	100	90 - 110	2004-09-10
Dissolved Manganese		mg/L	1.00	0.999	100	90 - 110	2004-09-10
Dissolved Molybdenum		mg/L	1.00	0.993	99	90 - 110	2004-09-10
Dissolved Nickel		mg/L	1.00	0.997	100	90 - 110	2004-09-10
Dissolved Lead		mg/L	1.00	0.994	99	90 - 110	2004-09-10
Dissolved Selenium		mg/L	1.00	0.997	100	90 - 110	2004-09-10
Dissolved Tin		mg/L	1.00	1.00	100	90 - 110	2004-09-10
Dissolved Strontium		mg/L	1.00	1.03	103	90 - 110	2004-09-10
Dissolved Vanadium		mg/L	1.00	0.996	100	90 - 110	2004-09-10
Dissolved Zinc		mg/L	1.00	0.995	100	90 - 110	2004-09-10

Standard (CCV-1) QC Batch: 12580

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.969	97	90 - 110	2004-09-10

Standard (CCV-1) QC Batch: 12580

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silica		mg/L	5.00	4.99	100	90 - 110	2004-09-10

Standard (CCV-1) QC Batch: 12580

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.120	96	90 - 110	2004-09-10
Dissolved Aluminum		mg/L	1.00	0.961	96	90 - 110	2004-09-10
Dissolved Arsenic		mg/L	1.00	0.980	98	90 - 110	2004-09-10
Dissolved Boron		mg/L	1.00	1.06	106	90 - 110	2004-09-10
Dissolved Barium		mg/L	1.00	0.974	97	90 - 110	2004-09-10
Dissolved Beryllium		mg/L	1.00	0.969	97	90 - 110	2004-09-10
Dissolved Cadmium		mg/L	1.00	0.967	97	90 - 110	2004-09-10
Dissolved Cobalt		mg/L	1.00	0.960	96	90 - 110	2004-09-10
Dissolved Chromium		mg/L	1.00	0.983	98	90 - 110	2004-09-10
Dissolved Copper		mg/L	1.00	1.05	105	90 - 110	2004-09-10
Dissolved Iron		mg/L	1.00	0.971	97	90 - 110	2004-09-10
Dissolved Manganese		mg/L	1.00	1.03	103	90 - 110	2004-09-10
Dissolved Molybdenum		mg/L	1.00	1.03	103	90 - 110	2004-09-10
Dissolved Nickel		mg/L	1.00	0.946	95	90 - 110	2004-09-10
Dissolved Lead		mg/L	1.00	0.949	95	90 - 110	2004-09-10
Dissolved Selenium		mg/L	1.00	0.916	92	90 - 110	2004-09-10
Dissolved Tin		mg/L	1.00	0.945	94	90 - 110	2004-09-10
Dissolved Strontium		mg/L	1.00	0.961	96	90 - 110	2004-09-10
Dissolved Vanadium		mg/L	1.00	0.944	94	90 - 110	2004-09-10
Dissolved Zinc		mg/L	1.00	0.946	95	90 - 110	2004-09-10

Standard (ICV-1) QC Batch: 12624

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silica		mg/L	5.00	4.98	100	95 - 105	2004-09-13

Standard (CCV-1) QC Batch: 12624

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silica		mg/L	5.00	5.06	101	90 - 110	2004-09-13

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 16, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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 11 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Ca, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12465	Date Analyzed:	2004-09-02	Analyzed By:	BP
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		502	mg/L	1	0.500

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	K, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12465	Date Analyzed:	2004-09-02	Analyzed By:	BP
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Potassium		247	mg/L	1	0.500

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Mg, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12465	Date Analyzed:	2004-09-02	Analyzed By:	BP
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Magnesium		1710	mg/L	1	0.500

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Na, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12465	Date Analyzed:	2004-09-02	Analyzed By:	BP
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Sodium		5200	mg/L	1	0.500

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12465	Date Analyzed:	2004-09-02	Analyzed By:	BP
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		367	mg/L	1	0.500
Dissolved Magnesium		358	mg/L	1	0.500
Dissolved Potassium		94.3	mg/L	1	0.500
Dissolved Sodium		1200	mg/L	1	0.500

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12465	Date Analyzed:	2004-09-02	Analyzed By:	BP
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		528	mg/L	1	0.500
Dissolved Magnesium		811	mg/L	1	0.500
Dissolved Potassium		133	mg/L	1	0.500
Dissolved Sodium		2560	mg/L	1	0.500

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12465	Date Analyzed:	2004-09-02	Analyzed By:	BP
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		311	mg/L	1	0.500
Dissolved Magnesium		349	mg/L	1	0.500
Dissolved Potassium		108	mg/L	1	0.500
Dissolved Sodium		1880	mg/L	1	0.500

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12465	Date Analyzed:	2004-09-02	Analyzed By:	BP
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		523	mg/L	1	0.500
Dissolved Magnesium		570	mg/L	1	0.500
Dissolved Potassium		134	mg/L	1	0.500
Dissolved Sodium		1660	mg/L	1	0.500

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A

QC Batch:	12465	Date Analyzed:	2004-09-02	Analyzed By:	BP
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		183	mg/L	1	0.500
Dissolved Magnesium		400	mg/L	1	0.500
Dissolved Potassium		103	mg/L	1	0.500
Dissolved Sodium		2140	mg/L	1	0.500

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12465	Date Analyzed:	2004-09-02	Analyzed By:	BP
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		183	mg/L	1	0.500
Dissolved Magnesium		401	mg/L	1	0.500
Dissolved Potassium		105	mg/L	1	0.500
Dissolved Sodium		2200	mg/L	1	0.500

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12465	Date Analyzed:	2004-09-02	Analyzed By:	BP
Prep Batch:	10683	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		162	mg/L	1	0.500
Dissolved Magnesium		290	mg/L	1	0.500
Dissolved Potassium		101	mg/L	1	0.500
Dissolved Sodium		2310	mg/L	1	0.500

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12504	Date Analyzed:	2004-09-05	Analyzed By:	BP
Prep Batch:	11025	Date Prepared:	2004-09-03	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		223	mg/L	10	0.500
Dissolved Magnesium		327	mg/L	10	0.500
Dissolved Potassium		61.1	mg/L	10	0.500
Dissolved Sodium		1700	mg/L	100	0.500

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12504	Date Analyzed:	2004-09-05	Analyzed By:	BP
Prep Batch:	11025	Date Prepared:	2004-09-03	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		207	mg/L	10	0.500
Dissolved Magnesium		414	mg/L	10	0.500
Dissolved Potassium		68.0	mg/L	10	0.500
Dissolved Sodium		1610	mg/L	100	0.500

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12504	Date Analyzed:	2004-09-05	Analyzed By:	BP
Prep Batch:	11025	Date Prepared:	2004-09-03	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		169	mg/L	100	0.500
Dissolved Magnesium		403	mg/L	100	0.500
Dissolved Potassium		105	mg/L	10	0.500
Dissolved Sodium		2080	mg/L	100	0.500

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12504	Date Analyzed:	2004-09-05	Analyzed By:	BP
Prep Batch:	11025	Date Prepared:	2004-09-03	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		197	mg/L	10	0.500
Dissolved Magnesium		366	mg/L	10	0.500
Dissolved Potassium		80.5	mg/L	10	0.500
Dissolved Sodium		1720	mg/L	100	0.500

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	12504	Date Analyzed:	2004-09-05	Analyzed By:	BP
Prep Batch:	11025	Date Prepared:	2004-09-03	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		200	mg/L	10	0.500
Dissolved Magnesium		370	mg/L	10	0.500
Dissolved Potassium		82.0	mg/L	10	0.500
Dissolved Sodium		1710	mg/L	1	0.500

Method Blank (1) QC Batch: 12465

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 12465

Parameter	Flag	Result	Units	RL
Dissolved Potassium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 12465

Parameter	Flag	Result	Units	RL
Dissolved Magnesium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 12465

Parameter	Flag	Result	Units	RL
Dissolved Sodium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 12465

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5
Dissolved Potassium		<0.500	mg/L	0.5
Dissolved Sodium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 12504

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5
Dissolved Potassium		<0.500	mg/L	0.5
Dissolved Sodium		<0.500	mg/L	0.5

Laboratory Control Spike (LCS-1) QC Batch: 12465

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	99.1	98.5	mg/L	1	100	<0.00971	99	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12465

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Potassium	94.5	93.8	mg/L	1	100	<0.0297	94	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12465

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Magnesium	102	101	mg/L	1	100	<0.0138	102	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12465

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Sodium	99.2	97.3	mg/L	1	100	<0.0309	99	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12465

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	99.1	98.5	mg/L	1	100	<0.00971	99	1	85 - 115	20
Dissolved Magnesium	102	101	mg/L	1	100	<0.0138	102	1	85 - 115	20
Dissolved Potassium	94.5	93.8	mg/L	1	100	<0.0297	94	1	85 - 115	20
Dissolved Sodium	99.2	97.3	mg/L	1	100	<0.0309	99	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12504

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	101	100	mg/L	1	100	<0.00971	101	1	85 - 115	20
Dissolved Magnesium	103	102	mg/L	1	100	<0.0138	103	1	85 - 115	20
Dissolved Potassium	93.2	92.4	mg/L	1	100	<0.0297	93	1	85 - 115	20
Dissolved Sodium	99.2	97.7	mg/L	1	100	<0.0309	99	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) QC Batch: 12465

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium		258	261	mg/L	1	100	162	96	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) QC Batch: 12465

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Potassium	[12]	255	259	mg/L	1	100	101	154	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) QC Batch: 12465

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Magnesium		383	390	mg/L	1	100	290	93	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) QC Batch: 12465

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Sodium	[34]	2280	2350	mg/L	1	100	2310	30	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) QC Batch: 12465

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium		258	261	mg/L	1	100	162	96	1	75 - 125	20
Dissolved Magnesium		383	390	mg/L	1	100	290	93	2	75 - 125	20
Dissolved Potassium	[56]	255	259	mg/L	1	100	101	154	2	75 - 125	20
Dissolved Sodium	[78]	2280	2350	mg/L	1	100	2310	30	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (CCV-1) QC Batch: 12465

[1]Spike recovery out of range due to peak interference. LCS/LCSD show the process within control.
[2]Spike recovery out of range due to peak interference. LCS/LCSD show the process within control.
[3]Spike recovery out of range due to matrix effects. LCS/LCSD show the process within control.
[4]Spike recovery out of range due to matrix effects. LCS/LCSD show the process within control.
[5]Spike recovery out of range due to peak interference. LCS/LCSD show the process within control.
[6]Spike recovery out of range due to peak interference. LCS/LCSD show the process within control.
[7]Spike recovery out of range due to matrix effects. LCS/LCSD show the process within control.
[8]Spike recovery out of range due to matrix effects. LCS/LCSD show the process within control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.9	100	90 - 110	2004-09-02

Standard (CCV-1) QC Batch: 12465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Potassium		mg/L	25.0	25.4	102	90 - 110	2004-09-02

Standard (CCV-1) QC Batch: 12465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Magnesium		mg/L	25.0	24.9	100	90 - 110	2004-09-02

Standard (CCV-1) QC Batch: 12465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Sodium		mg/L	25.0	25.7	103	90 - 110	2004-09-02

Standard (CCV-1) QC Batch: 12465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.9	100	90 - 110	2004-09-02
Dissolved Magnesium		mg/L	25.0	24.9	100	90 - 110	2004-09-02
Dissolved Potassium		mg/L	25.0	25.4	102	90 - 110	2004-09-02
Dissolved Sodium		mg/L	25.0	25.7	103	90 - 110	2004-09-02

Standard (CCV-2) QC Batch: 12465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	26.3	105	90 - 110	2004-09-02

Standard (CCV-2) QC Batch: 12465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Potassium		mg/L	25.0	26.2	105	90 - 110	2004-09-02

Standard (CCV-2) QC Batch: 12465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Magnesium		mg/L	25.0	26.2	105	90 - 110	2004-09-02

Standard (CCV-2) QC Batch: 12465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Sodium		mg/L	25.0	26.8	107	90 - 110	2004-09-02

Standard (CCV-2) QC Batch: 12465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	26.3	105	90 - 110	2004-09-02
Dissolved Magnesium		mg/L	25.0	26.2	105	90 - 110	2004-09-02
Dissolved Potassium		mg/L	25.0	26.2	105	90 - 110	2004-09-02
Dissolved Sodium		mg/L	25.0	26.8	107	90 - 110	2004-09-02

Standard (ICV-1) QC Batch: 12504

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.0	100	90 - 110	2004-09-05
Dissolved Magnesium		mg/L	25.0	25.1	100	90 - 110	2004-09-05
Dissolved Potassium		mg/L	25.0	25.2	101	90 - 110	2004-09-05
Dissolved Sodium		mg/L	25.0	25.0	100	90 - 110	2004-09-05

Standard (CCV-1) QC Batch: 12504

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.0	100	90 - 110	2004-09-05
Dissolved Magnesium		mg/L	25.0	25.1	100	90 - 110	2004-09-05
Dissolved Potassium		mg/L	25.0	24.7	99	90 - 110	2004-09-05
Dissolved Sodium		mg/L	25.0	25.0	100	90 - 110	2004-09-05

Standard (CCV-2) QC Batch: 12504

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.2	101	90 - 110	2004-09-05
Dissolved Magnesium		mg/L	25.0	25.4	102	90 - 110	2004-09-05

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Potassium		mg/L	25.0	24.9	100	90 - 110	2004-09-05
Dissolved Sodium		mg/L	25.0	25.2	101	90 - 110	2004-09-05

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 15, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11866	Date Analyzed:	2004-08-11	Analyzed By:	DS
Prep Batch:	10490	Date Prepared:	2004-08-11	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[1]	1.24	μg/L	1	2.50	50	35.8 - 121

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12154	Date Analyzed:	2004-08-19	Analyzed By:	DS
Prep Batch:	10736	Date Prepared:	2004-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		90.4	μg/L	20	0.500
RDX		<10.0	μg/L	20	0.500
1,3,5-Trinitrobenzene		<10.0	μg/L	20	0.500
1,3-Dinitrobenzene		<10.0	μg/L	20	0.500
Tetryl		<10.0	μg/L	20	0.500
Nitrobenzene		<10.0	μg/L	20	0.500
TNT		<10.0	μg/L	20	0.500
4-amino-DNT / 2-amino-DNT		<10.0	μg/L	20	0.500
2,6-DNT / 2,4-DNT		<10.0	μg/L	20	0.500
2-NT		<10.0	μg/L	20	0.500
4-NT		<10.0	μg/L	20	0.500
3-NT		<10.0	μg/L	20	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[2]	1.83	μg/L	20	0.125	73	35.8 - 121

[1] Unknown peak detected.
[2] Changed spike amount from 2.5 to 0.125 due to post prep dilution.

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12154	Date Analyzed:	2004-08-19	Analyzed By:	DS
Prep Batch:	10736	Date Prepared:	2004-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	µg/L	1	0.500
RDX		<0.500	µg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	µg/L	1	0.500
1,3-Dinitrobenzene		<0.500	µg/L	1	0.500
Tetryl		<0.500	µg/L	1	0.500
Nitrobenzene		<0.500	µg/L	1	0.500
TNT		<0.500	µg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	µg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	µg/L	1	0.500
2-NT		<0.500	µg/L	1	0.500
4-NT		<0.500	µg/L	1	0.500
3-NT		<0.500	µg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[3]	0.0702	µg/L	1	2.50	3	35.8 - 121

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12154	Date Analyzed:	2004-08-19	Analyzed By:	DS
Prep Batch:	10736	Date Prepared:	2004-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		2.87	µg/L	1	0.500
RDX		<0.500	µg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	µg/L	1	0.500
1,3-Dinitrobenzene		<0.500	µg/L	1	0.500
Tetryl		<0.500	µg/L	1	0.500
Nitrobenzene		<0.500	µg/L	1	0.500
TNT		<0.500	µg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	µg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	µg/L	1	0.500
2-NT		<0.500	µg/L	1	0.500
4-NT		<0.500	µg/L	1	0.500
3-NT		<0.500	µg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[4]	0.776	µg/L	1	2.50	31	35.8 - 121

Sample: 41282 - HLSF-0154-DRW-013-0804

[3]Surrogate recovery out of range due to matrix interference. QC shows process is within control.
[4]Surrogate recovery out of range due to matrix interference. QC shows process is within control.

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12154	Date Analyzed:	2004-08-19	Analyzed By:	DS
Prep Batch:	10736	Date Prepared:	2004-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	µg/L	1	0.500
RDX		<0.500	µg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	µg/L	1	0.500
1,3-Dinitrobenzene		<0.500	µg/L	1	0.500
Tetryl		<0.500	µg/L	1	0.500
Nitrobenzene		<0.500	µg/L	1	0.500
TNT		<0.500	µg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	µg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	µg/L	1	0.500
2-NT		<0.500	µg/L	1	0.500
4-NT		<0.500	µg/L	1	0.500
3-NT		<0.500	µg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[5]	0.271	µg/L	1	2.50	11	35.8 - 121

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12154	Date Analyzed:	2004-08-19	Analyzed By:	DS
Prep Batch:	10736	Date Prepared:	2004-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		304	µg/L	400	0.500
RDX		<200	µg/L	400	0.500
1,3,5-Trinitrobenzene		<200	µg/L	400	0.500
1,3-Dinitrobenzene		<200	µg/L	400	0.500
Tetryl		<200	µg/L	400	0.500
Nitrobenzene		<200	µg/L	400	0.500
TNT		<200	µg/L	400	0.500
4-amino-DNT / 2-amino-DNT		<200	µg/L	400	0.500
2,6-DNT / 2,4-DNT		<200	µg/L	400	0.500
2-NT		<200	µg/L	400	0.500
4-NT		<200	µg/L	400	0.500
3-NT		<200	µg/L	400	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[6]	19.9	µg/L	400	0.00625	796	35.8 - 121

Sample: 41388 - HLSF-0154-DRW-103-0804

[5]Surrogate recovery out of range due to matrix interference. QC shows process is within control.
[6]Surrogate recovery out of range due to peak interference. QC shows process is within control.

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12154	Date Analyzed:	2004-08-19	Analyzed By:	DS
Prep Batch:	10736	Date Prepared:	2004-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		5790	µg/L	2000	0.500
RDX		<1000	µg/L	2000	0.500
1,3,5-Trinitrobenzene		<1000	µg/L	2000	0.500
1,3-Dinitrobenzene		<1000	µg/L	2000	0.500
Tetryl		<1000	µg/L	2000	0.500
Nitrobenzene		<1000	µg/L	2000	0.500
TNT		<1000	µg/L	2000	0.500
4-amino-DNT / 2-amino-DNT		<1000	µg/L	2000	0.500
2,6-DNT / 2,4-DNT		<1000	µg/L	2000	0.500
2-NT		<1000	µg/L	2000	0.500
4-NT		<1000	µg/L	2000	0.500
3-NT		<1000	µg/L	2000	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[7]	27.4	µg/L	2000	0.00125	1096	35.8 - 121

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12154	Date Analyzed:	2004-08-19	Analyzed By:	DS
Prep Batch:	10736	Date Prepared:	2004-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		2100	µg/L	500	0.500
RDX		<250	µg/L	500	0.500
1,3,5-Trinitrobenzene		<250	µg/L	500	0.500
1,3-Dinitrobenzene		<250	µg/L	500	0.500
Tetryl		<250	µg/L	500	0.500
Nitrobenzene		<250	µg/L	500	0.500
TNT		<250	µg/L	500	0.500
4-amino-DNT / 2-amino-DNT		<250	µg/L	500	0.500
2,6-DNT / 2,4-DNT		<250	µg/L	500	0.500
2-NT		<250	µg/L	500	0.500
4-NT		<250	µg/L	500	0.500
3-NT		<250	µg/L	500	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[8]	6.48	µg/L	500	0.00500	259	35.8 - 121

Sample: 41702 - HLSF-0154-DRW-001-0804

[7] Surrogate recovery out of range due to peak interference. QC shows process is within control.
[8] Surrogate recovery out of range due to peak interference. QC shows process is within control.

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12155	Date Analyzed:	2004-08-19	Analyzed By:	DS
Prep Batch:	10737	Date Prepared:	2004-08-19	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		492	µg/L	100	0.500
RDX		234	µg/L	100	0.500
1,3,5-Trinitrobenzene		<50.0	µg/L	100	0.500
1,3-Dinitrobenzene		<50.0	µg/L	100	0.500
Tetryl		<50.0	µg/L	100	0.500
Nitrobenzene		<50.0	µg/L	100	0.500
TNT		<50.0	µg/L	100	0.500
4-amino-DNT / 2-amino-DNT		<50.0	µg/L	100	0.500
2,6-DNT / 2,4-DNT		<50.0	µg/L	100	0.500
2-NT		<50.0	µg/L	100	0.500
4-NT		<50.0	µg/L	100	0.500
3-NT		<50.0	µg/L	100	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[9]	62.4	µg/L	100	0.0250	2496	35.8 - 121

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12155	Date Analyzed:	2004-08-19	Analyzed By:	DS
Prep Batch:	10737	Date Prepared:	2004-08-19	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		129	µg/L	25	0.500
RDX		74.9	µg/L	25	0.500
1,3,5-Trinitrobenzene		<12.5	µg/L	25	0.500
1,3-Dinitrobenzene		<12.5	µg/L	25	0.500
Tetryl		<12.5	µg/L	25	0.500
Nitrobenzene		<12.5	µg/L	25	0.500
TNT		54.6	µg/L	25	0.500
4-amino-DNT / 2-amino-DNT		<12.5	µg/L	25	0.500
2,6-DNT / 2,4-DNT		25.1	µg/L	25	0.500
2-NT		<12.5	µg/L	25	0.500
4-NT		<12.5	µg/L	25	0.500
3-NT		56.3	µg/L	25	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[10]	14.8	µg/L	25	0.100	592	35.8 - 121

Sample: 41886 - HLSF-0154-DRW-002-0804

[9]Surrogate recovery out of range due to peak interference. QC shows process is within control.
[10]Surrogate recovery out of range due to peak interference. QC shows process is within control.

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12406	Date Analyzed:	2004-08-30	Analyzed By:	DS
Prep Batch:	10954	Date Prepared:	2004-08-25	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		354	μg/L	200	0.500
RDX		<100	μg/L	200	0.500
1,3,5-Trinitrobenzene		<100	μg/L	200	0.500
1,3-Dinitrobenzene		<100	μg/L	200	0.500
Tetryl		<100	μg/L	200	0.500
Nitrobenzene		<100	μg/L	200	0.500
TNT		<100	μg/L	200	0.500
4-amino-DNT / 2-amino-DNT		<100	μg/L	200	0.500
2,6-DNT / 2,4-DNT		<100	μg/L	200	0.500
2-NT		<100	μg/L	200	0.500
4-NT		<100	μg/L	200	0.500
3-NT		<100	μg/L	200	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[11]	9.34	μg/L	200	0.0125	374	35.8 - 121

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12406	Date Analyzed:	2004-08-30	Analyzed By:	DS
Prep Batch:	10954	Date Prepared:	2004-08-25	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		334	μg/L	100	0.500
RDX		52.3	μg/L	100	0.500
1,3,5-Trinitrobenzene		<50.0	μg/L	100	0.500
1,3-Dinitrobenzene		<50.0	μg/L	100	0.500
Tetryl		<50.0	μg/L	100	0.500
Nitrobenzene		<50.0	μg/L	100	0.500
TNT		<50.0	μg/L	100	0.500
4-amino-DNT / 2-amino-DNT		<50.0	μg/L	100	0.500
2,6-DNT / 2,4-DNT		<50.0	μg/L	100	0.500
2-NT		<50.0	μg/L	100	0.500
4-NT		<50.0	μg/L	100	0.500
3-NT		<50.0	μg/L	100	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[12]	1.91	μg/L	100	0.0250	76	35.8 - 121

Sample: 41890 - HLSF-0154-HCF-005-0804

[11] Surrogate recovery out of range due to peak interference. QC shows process is within control.
[12] Changed spike amount from 2.5 to 0.025 due to post prep dilution.

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	12406	Date Analyzed:	2004-08-30	Analyzed By:	DS
Prep Batch:	10954	Date Prepared:	2004-08-25	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		396	μg/L	100	0.500
RDX		84.6	μg/L	100	0.500
1,3,5-Trinitrobenzene		<50.0	μg/L	100	0.500
1,3-Dinitrobenzene		<50.0	μg/L	100	0.500
Tetryl		<50.0	μg/L	100	0.500
Nitrobenzene		<50.0	μg/L	100	0.500
TNT		<50.0	μg/L	100	0.500
4-amino-DNT / 2-amino-DNT		<50.0	μg/L	100	0.500
2,6-DNT / 2,4-DNT		<50.0	μg/L	100	0.500
2-NT		<50.0	μg/L	100	0.500
4-NT		<50.0	μg/L	100	0.500
3-NT		<50.0	μg/L	100	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[13]	4.47	μg/L	100	0.0250	179	35.8 - 121

Method Blank (1) QC Batch: 11866

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.62	μg/L	1	2.50	105	35.8 - 121

Method Blank (1) QC Batch: 12154

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5

continued . . .

[13] Surrogate recovery out of range due to peak interference. QC shows process is within control.

method blank continued . . .

Parameter	Flag	Result	Units	RL
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.01	μg/L	1	2.50	80	35.8 - 121

Method Blank (1) QC Batch: 12155

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.77	μg/L	1	2.50	71	35.8 - 121

Method Blank (1) QC Batch: 12406

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.82	μg/L	1	2.50	73	35.8 - 121

Laboratory Control Spike (LCS-1) QC Batch: 11866

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.60	2.48	μg/L	1	2.50	<0.196	104	5	52.3 - 129	20
RDX	2.76	2.78	μg/L	1	2.50	<0.364	110	1	65.7 - 117	20
1,3,5-Trinitrobenzene	3.11	3.16	μg/L	1	2.50	<0.114	124	2	30.3 - 141	20
1,3-Dinitrobenzene	2.75	2.75	μg/L	1	2.50	<0.108	110	0	45.9 - 139	20
Tetryl	2.11	2.10	μg/L	1	2.50	<0.200	84	0	49 - 129	20
Nitrobenzene	2.61	2.40	μg/L	1	2.50	<0.0990	104	8	0 - 133	20
TNT	3.13	3.13	μg/L	1	2.50	<0.116	125	0	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.43	2.42	μg/L	1	2.50	<0.146	97	0	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.68	2.58	μg/L	1	2.50	<0.183	107	4	44.8 - 130	20
2-NT	2.43	2.49	μg/L	1	2.50	<0.139	97	2	44.9 - 128	20
4-NT	2.49	2.59	μg/L	1	2.50	<0.0851	100	4	47.8 - 123	20
3-NT	2.00	1.82	μg/L	1	2.50	<0.176	80	9	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.01	2.05	μg/L	1	2.50	80	82	42 - 125

Laboratory Control Spike (LCS-1) QC Batch: 12154

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.10	2.17	μg/L	1	2.50	<0.196	84	3	52.3 - 129	20
RDX	2.46	2.08	μg/L	1	2.50	<0.364	98	17	65.7 - 117	20
1,3,5-Trinitrobenzene	2.24	2.33	μg/L	1	2.50	<0.114	90	4	30.3 - 141	20
1,3-Dinitrobenzene	2.69	2.71	μg/L	1	2.50	<0.108	108	1	45.9 - 139	20
Tetryl	2.79	2.61	μg/L	1	2.50	<0.200	112	7	49 - 129	20
Nitrobenzene	3.02	2.62	μg/L	1	2.50	<0.0990	121	14	0 - 133	20
TNT	3.14	2.88	μg/L	1	2.50	<0.116	126	9	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.80	2.51	μg/L	1	2.50	<0.146	112	11	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.67	2.55	μg/L	1	2.50	<0.183	107	4	44.8 - 130	20
2-NT	2.84	2.57	μg/L	1	2.50	<0.139	114	10	44.9 - 128	20
4-NT	2.66	2.41	μg/L	1	2.50	<0.0851	106	10	47.8 - 123	20
3-NT	2.24	2.05	μg/L	1	2.50	<0.176	90	9	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.29	2.55	μg/L	1	2.50	92	102	42 - 125

Laboratory Control Spike (LCS-1) QC Batch: 12155

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.20	2.18	μg/L	1	2.50	<0.196	88	1	52.3 - 129	20
RDX	2.47	2.46	μg/L	1	2.50	<0.364	99	0	65.7 - 117	20
1,3,5-Trinitrobenzene	2.27	2.17	μg/L	1	2.50	<0.114	91	4	30.3 - 141	20
1,3-Dinitrobenzene	2.62	2.50	μg/L	1	2.50	<0.108	105	5	45.9 - 139	20
Tetryl	2.76	2.60	μg/L	1	2.50	<0.200	110	6	49 - 129	20
Nitrobenzene	2.37	2.37	μg/L	1	2.50	<0.0990	95	0	0 - 133	20
TNT	2.58	2.52	μg/L	1	2.50	<0.116	103	2	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.64	2.40	μg/L	1	2.50	<0.146	106	10	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.44	2.52	μg/L	1	2.50	<0.183	98	3	44.8 - 130	20
2-NT	2.62	2.72	μg/L	1	2.50	<0.139	105	4	44.9 - 128	20
4-NT	2.24	2.34	μg/L	1	2.50	<0.0851	90	4	47.8 - 123	20
3-NT	2.00	2.09	μg/L	1	2.50	<0.176	80	4	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.53	2.58	μg/L	1	2.50	101	103	42 - 125

Laboratory Control Spike (LCS-1) QC Batch: 12406

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.99	2.78	μg/L	1	2.50	<0.196	120	7	52.3 - 129	20
RDX	2.50	2.76	μg/L	1	2.50	<0.364	100	10	65.7 - 117	20
1,3,5-Trinitrobenzene	2.81	2.83	μg/L	1	2.50	<0.114	112	1	30.3 - 141	20
1,3-Dinitrobenzene	2.91	3.03	μg/L	1	2.50	<0.108	116	4	45.9 - 139	20
Tetryl	2.48	2.32	μg/L	1	2.50	<0.200	99	7	49 - 129	20
Nitrobenzene	2.64	2.77	μg/L	1	2.50	<0.0990	106	5	0 - 133	20
TNT	3.01	3.02	μg/L	1	2.50	<0.116	120	0	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.91	2.89	μg/L	1	2.50	<0.146	116	1	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.84	2.75	μg/L	1	2.50	<0.183	114	3	44.8 - 130	20
2-NT	2.89	3.01	μg/L	1	2.50	<0.139	116	4	44.9 - 128	20
4-NT	2.77	2.56	μg/L	1	2.50	<0.0851	111	8	47.8 - 123	20
3-NT	2.31	2.44	μg/L	1	2.50	<0.176	92	5	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.67	2.75	μg/L	1	2.50	107	110	42 - 125

Matrix Spike (MS-1) QC Batch: 12155

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	[14][15]	122	121	μg/L	25	0.100	129	280	1	45 - 120	20
RDX	[16][17]	19.7	17.1	μg/L	25	0.100	74.9	2208	14	44.2 - 103	20
1,3,5-Trinitrobenzene	[18][19]	19.2	19.2	μg/L	25	0.100	<2.86	768	0	20.9 - 105	20
1,3-Dinitrobenzene	[20][21]	3.86	4.36	μg/L	25	0.100	8.66	192	12	35.8 - 121	20
Tetryl	[22][23]	10.7	9.78	μg/L	25	0.100	<5.00	428	9	30.6 - 105	20
Nitrobenzene	[24][25]	5.70	5.22	μg/L	25	0.100	11.1	216	9	0 - 109	20
TNT	[26][27]	14.1	14.4	μg/L	25	0.100	54.6	1620	2	17.7 - 134	20
4-amino-DNT / 2-amino-DNT	[28][29]	12.3	11.0	μg/L	25	0.100	<3.65	492	11	43.7 - 97.4	20
2,6-DNT / 2,4-DNT	[30][31]	<4.56	<4.56	μg/L	25	0.100	25.1	1004	0	11.1 - 123	20
2-NT	[32][33]	7.28	6.01	μg/L	25	0.100	8.44	46	19	11.1 - 113	20
4-NT	[34][35]	4.84	5.08	μg/L	25	0.100	<2.13	194	5	30.2 - 114	20
3-NT	[36][37]	12.7	15.1	μg/L	25	0.100	56.3	1744	17	53.4 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
1,2-Dinitrobenzene	[38][39]	12.8	13.4	μg/L	25	0.1	512	536	27.9 - 112

Standard (ICV-1) QC Batch: 11866

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		μg/L	500	521	104	85 - 115	2004-08-11
RDX		μg/L	500	490	98	85 - 115	2004-08-11
1,3,5-Trinitrobenzene		μg/L	500	498	100	85 - 115	2004-08-11
1,3-Dinitrobenzene		μg/L	500	554	111	85 - 115	2004-08-11
Tetryl		μg/L	500	505	101	85 - 115	2004-08-11
Nitrobenzene		μg/L	500	472	94	85 - 115	2004-08-11
TNT		μg/L	500	549	110	85 - 115	2004-08-11

continued . . .

[14]MS/MSD out of range due to matrix difficulties.
[15]MS/MSD out of range due to matrix difficulties.
[16]MS/MSD out of range due to matrix difficulties.
[17]MS/MSD out of range due to matrix difficulties.
[18]MS/MSD out of range due to matrix difficulties.
[19]MS/MSD out of range due to matrix difficulties.
[20]MS/MSD out of range due to matrix difficulties.
[21]MS/MSD out of range due to matrix difficulties.
[22]MS/MSD out of range due to matrix difficulties.
[23]MS/MSD out of range due to matrix difficulties.
[24]MS/MSD out of range due to matrix difficulties.
[25]MS/MSD out of range due to matrix difficulties.
[26]MS/MSD out of range due to matrix difficulties.
[27]MS/MSD out of range due to matrix difficulties.
[28]MS/MSD out of range due to matrix difficulties.
[29]MS/MSD out of range due to matrix difficulties.
[30]MS/MSD out of range due to matrix difficulties.
[31]MS/MSD out of range due to matrix difficulties.
[32]MS/MSD out of range due to matrix difficulties.
[33]MS/MSD out of range due to matrix difficulties.
[34]MS/MSD out of range due to matrix difficulties.
[35]MS/MSD out of range due to matrix difficulties.
[36]MS/MSD out of range due to matrix difficulties.
[37]MS/MSD out of range due to matrix difficulties.
[38]Surrogate recovery out of range due to peak interference. QC shows process is within control.
[39]Surrogate recovery out of range due to peak interference. QC shows process is within control.

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
4-amino-DNT / 2-amino-DNT		µg/L	500	468	94	85 - 115	2004-08-11
2,6-DNT / 2,4-DNT		µg/L	500	514	103	85 - 115	2004-08-11
2-NT		µg/L	500	521	104	85 - 115	2004-08-11
4-NT		µg/L	500	564	113	85 - 115	2004-08-11
3-NT		µg/L	500	441	88	85 - 115	2004-08-11

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.44	µg/L	1	2.50	98	85 - 115

Standard (CCV-1) QC Batch: 11866

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	495	99	85 - 115	2004-08-11
RDX		µg/L	500	464	93	85 - 115	2004-08-11
1,3,5-Trinitrobenzene		µg/L	500	561	112	85 - 115	2004-08-11
1,3-Dinitrobenzene		µg/L	500	555	111	85 - 115	2004-08-11
Tetryl		µg/L	500	442	88	85 - 115	2004-08-11
Nitrobenzene		µg/L	500	456	91	85 - 115	2004-08-11
TNT		µg/L	500	565	113	85 - 115	2004-08-11
4-amino-DNT / 2-amino-DNT		µg/L	500	470	94	85 - 115	2004-08-11
2,6-DNT / 2,4-DNT		µg/L	500	516	103	85 - 115	2004-08-11
2-NT		µg/L	500	513	103	85 - 115	2004-08-11
4-NT		µg/L	500	515	103	85 - 115	2004-08-11
3-NT		µg/L	500	426	85	85 - 115	2004-08-11

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.29	µg/L	1	2.50	92	85 - 115

Standard (ICV-1) QC Batch: 12154

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	522	104	85 - 115	2004-08-19
RDX		µg/L	500	456	91	85 - 115	2004-08-19
1,3,5-Trinitrobenzene		µg/L	500	463	93	85 - 115	2004-08-19
1,3-Dinitrobenzene		µg/L	500	554	111	85 - 115	2004-08-19
Tetryl		µg/L	500	496	99	85 - 115	2004-08-19
Nitrobenzene		µg/L	500	528	106	85 - 115	2004-08-19
TNT		µg/L	500	555	111	85 - 115	2004-08-19
4-amino-DNT / 2-amino-DNT		µg/L	500	551	110	85 - 115	2004-08-19
2,6-DNT / 2,4-DNT		µg/L	500	554	111	85 - 115	2004-08-19
2-NT		µg/L	500	561	112	85 - 115	2004-08-19
4-NT		µg/L	500	464	93	85 - 115	2004-08-19
3-NT		µg/L	500	447	89	85 - 115	2004-08-19

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.81	µg/L	1	2.50	112	85 - 115

Standard (CCV-1) QC Batch: 12154

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	435	87	85 - 115	2004-08-19
RDX		µg/L	500	474	95	85 - 115	2004-08-19
1,3,5-Trinitrobenzene		µg/L	500	532	106	85 - 115	2004-08-19
1,3-Dinitrobenzene		µg/L	500	571	114	85 - 115	2004-08-19
Tetryl		µg/L	500	467	93	85 - 115	2004-08-19
Nitrobenzene		µg/L	500	506	101	85 - 115	2004-08-19
TNT		µg/L	500	562	112	85 - 115	2004-08-19
4-amino-DNT / 2-amino-DNT		µg/L	500	565	113	85 - 115	2004-08-19
2,6-DNT / 2,4-DNT		µg/L	500	536	107	85 - 115	2004-08-19
2-NT		µg/L	500	561	112	85 - 115	2004-08-19
4-NT		µg/L	500	507	101	85 - 115	2004-08-19
3-NT		µg/L	500	455	91	85 - 115	2004-08-19

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.75	µg/L	1	2.50	110	85 - 115

Standard (ICV-1) QC Batch: 12155

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	455	91	85 - 115	2004-08-19
RDX		µg/L	500	491	98	85 - 115	2004-08-19
1,3,5-Trinitrobenzene		µg/L	500	448	90	85 - 115	2004-08-19
1,3-Dinitrobenzene		µg/L	500	476	95	85 - 115	2004-08-19
Tetryl		µg/L	500	493	99	85 - 115	2004-08-19
Nitrobenzene		µg/L	500	452	90	85 - 115	2004-08-19
TNT		µg/L	500	524	105	85 - 115	2004-08-19
4-amino-DNT / 2-amino-DNT		µg/L	500	483	97	85 - 115	2004-08-19
2,6-DNT / 2,4-DNT		µg/L	500	480	96	85 - 115	2004-08-19
2-NT		µg/L	500	518	104	85 - 115	2004-08-19
4-NT		µg/L	500	530	106	85 - 115	2004-08-19
3-NT		µg/L	500	435	87	85 - 115	2004-08-19

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.29	µg/L	1	2.50	92	85 - 115

Standard (CCV-1) QC Batch: 12155

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	450	90	85 - 115	2004-08-19
RDX		µg/L	500	478	96	85 - 115	2004-08-19
1,3,5-Trinitrobenzene		µg/L	500	533	107	85 - 115	2004-08-19
1,3-Dinitrobenzene		µg/L	500	551	110	85 - 115	2004-08-19
Tetryl		µg/L	500	433	87	85 - 115	2004-08-19
Nitrobenzene		µg/L	500	475	95	85 - 115	2004-08-19
TNT		µg/L	500	560	112	85 - 115	2004-08-19
4-amino-DNT / 2-amino-DNT		µg/L	500	518	104	85 - 115	2004-08-19
2,6-DNT / 2,4-DNT		µg/L	500	475	95	85 - 115	2004-08-19
2-NT		µg/L	500	564	113	85 - 115	2004-08-19
4-NT		µg/L	500	427	85	85 - 115	2004-08-19
3-NT		µg/L	500	492	98	85 - 115	2004-08-19

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.65	µg/L	1	2.50	106	85 - 115

Standard (ICV-1) QC Batch: 12406

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	499	100	85 - 115	2004-08-30
RDX		µg/L	500	564	113	85 - 115	2004-08-30
1,3,5-Trinitrobenzene		µg/L	500	539	108	85 - 115	2004-08-30
1,3-Dinitrobenzene		µg/L	500	571	114	85 - 115	2004-08-30
Tetryl		µg/L	500	503	101	85 - 115	2004-08-30
Nitrobenzene		µg/L	500	502	100	85 - 115	2004-08-30
TNT		µg/L	500	538	108	85 - 115	2004-08-30
4-amino-DNT / 2-amino-DNT		µg/L	500	517	103	85 - 115	2004-08-30
2,6-DNT / 2,4-DNT		µg/L	500	505	101	85 - 115	2004-08-30
2-NT		µg/L	500	569	114	85 - 115	2004-08-30
4-NT		µg/L	500	541	108	85 - 115	2004-08-30
3-NT		µg/L	500	532	106	85 - 115	2004-08-30

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.65	µg/L	1	2.50	106	85 - 115

Standard (CCV-1) QC Batch: 12406

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	482	96	85 - 115	2004-08-30
RDX		µg/L	500	453	91	85 - 115	2004-08-30
1,3,5-Trinitrobenzene		µg/L	500	522	104	85 - 115	2004-08-30
1,3-Dinitrobenzene		µg/L	500	544	109	85 - 115	2004-08-30
Tetryl		µg/L	500	485	97	85 - 115	2004-08-30
Nitrobenzene		µg/L	500	502	100	85 - 115	2004-08-30

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TNT		μg/L	500	556	111	85 - 115	2004-08-30
4-amino-DNT / 2-amino-DNT		μg/L	500	497	99	85 - 115	2004-08-30
2,6-DNT / 2,4-DNT		μg/L	500	525	105	85 - 115	2004-08-30
2-NT		μg/L	500	513	103	85 - 115	2004-08-30
4-NT		μg/L	500	534	107	85 - 115	2004-08-30
3-NT		μg/L	500	472	94	85 - 115	2004-08-30

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.38	μg/L	1	2.50	95	85 - 115

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 15, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12353	Date Analyzed:	2004-08-30	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12353	Date Analyzed:	2004-08-30	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12353	Date Analyzed:	2004-08-30	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12353	Date Analyzed:	2004-08-30	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12353	Date Analyzed:	2004-08-30	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12353	Date Analyzed:	2004-08-30	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12353	Date Analyzed:	2004-08-30	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12353	Date Analyzed:	2004-08-30	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12355	Date Analyzed:	2004-08-30	Analyzed By:	TP
Prep Batch:	10911	Date Prepared:	2004-08-24	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	12355	Date Analyzed:	2004-08-30	Analyzed By:	TP

Prep Batch: 10911 Date Prepared: 2004-08-24 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/A
QC Batch: 12355 Date Analyzed: 2004-08-30 Analyzed By: TP
Prep Batch: 10911 Date Prepared: 2004-08-24 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/A
QC Batch: 12355 Date Analyzed: 2004-08-30 Analyzed By: TP
Prep Batch: 10911 Date Prepared: 2004-08-24 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/A
QC Batch: 12355 Date Analyzed: 2004-08-30 Analyzed By: TP
Prep Batch: 10911 Date Prepared: 2004-08-24 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Method Blank (1) QC Batch: 12353

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Method Blank (1) QC Batch: 12355

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Laboratory Control Spike (LCS-1) QC Batch: 12353

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.000970	0.00103	mg/L	1	0.00100	<0.0000329	97	6	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12355

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00101	0.00106	mg/L	1	0.00100	<0.0000329	101	5	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12353

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	[1,2]	0.00124	0.00123	mg/L	1	0.00100	<0.0000329	124	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12355

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	[3]	0.00123	0.00117	mg/L	1	0.00100	<0.0000329	123	5	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 12353

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00106	106	80 - 120	2004-08-30

Standard (CCV-1) QC Batch: 12353

[1]MS recovery exceeds limit due to matrix effect,LCS recovery demonstrates process under control
[2]MS recovery exceeds limit due to matrix effect,LCS recovery demonstrates process under control
[3]MS recovery exceeds limit due to matrix effect,LCS recovery demonstrates process under control

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00110	110	80 - 120	2004-08-30

Standard (ICV-1) QC Batch: 12355

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00106	106	80 - 120	2004-08-30

Standard (CCV-1) QC Batch: 12355

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00112	112	80 - 120	2004-08-30

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 17, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12324	Date Analyzed:	2004-08-10	Analyzed By:	JR
Prep Batch:	10891	Date Prepared:	2004-08-10	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		4940	mg/L	500	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		149	mg/L	50	0.100
Sulfate		11800	mg/L	1000	1.00

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Bromide (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12331	Date Analyzed:	2004-08-11	Analyzed By:	JR
Prep Batch:	10897	Date Prepared:	2004-08-11	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12331	Date Analyzed:	2004-08-11	Analyzed By:	JR
Prep Batch:	10897	Date Prepared:	2004-08-11	Prepared By:	JR
QC Batch:	12336	Date Analyzed:	2004-08-10	Analyzed By:	JR
Prep Batch:	10901	Date Prepared:	2004-08-10	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		652	mg/L	50	2.00
Fluoride		0.308	mg/L	1	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		13.3	mg/L	5	0.100
Sulfate		3550	mg/L	500	1.00

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12331	Date Analyzed:	2004-08-11	Analyzed By:	JR
Prep Batch:	10897	Date Prepared:	2004-08-11	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		2530	mg/L	500	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		74.1	mg/L	50	0.100
Sulfate		6500	mg/L	500	1.00

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12367	Date Analyzed:	2004-08-12	Analyzed By:	JR
Prep Batch:	10924	Date Prepared:	2004-08-12	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		558	mg/L	50	2.00
Fluoride		3.95	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		15.4	mg/L	5	0.100
Sulfate		4820	mg/L	500	1.00

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12367	Date Analyzed:	2004-08-12	Analyzed By:	JR
Prep Batch:	10924	Date Prepared:	2004-08-12	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.890	mg/L	1	0.200
Chloride		1360	mg/L	100	2.00
Fluoride		4.17	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		44.4	mg/L	10	0.100
Sulfate		4810	mg/L	500	1.00

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12336	Date Analyzed:	2004-08-10	Analyzed By:	JR
Prep Batch:	10901	Date Prepared:	2004-08-10	Prepared By:	JR
QC Batch:	12368	Date Analyzed:	2004-08-13	Analyzed By:	JR
Prep Batch:	10925	Date Prepared:	2004-08-13	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.780	mg/L	1	0.200

continued . . .

sample 41385 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		806	mg/L	100	2.00
Fluoride		0.235	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		11.4	mg/L	5	0.100
Sulfate		3380	mg/L	500	1.00

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12336	Date Analyzed:	2004-08-10	Analyzed By:	JR
Prep Batch:	10901	Date Prepared:	2004-08-10	Prepared By:	JR
QC Batch:	12368	Date Analyzed:	2004-08-13	Analyzed By:	JR
Prep Batch:	10925	Date Prepared:	2004-08-13	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		787	mg/L	100	2.00
Fluoride		<2.00	mg/L	10	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		11.5	mg/L	5	0.100
Sulfate		3380	mg/L	500	1.00

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12368	Date Analyzed:	2004-08-13	Analyzed By:	JR
Prep Batch:	10925	Date Prepared:	2004-08-13	Prepared By:	JR
QC Batch:	12423	Date Analyzed:	2004-08-31	Analyzed By:	JR
Prep Batch:	10971	Date Prepared:	2004-08-31	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		576	mg/L	100	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		<0.500	mg/L	5	0.100
Sulfate		2950	mg/L	500	1.00

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12336	Date Analyzed:	2004-08-10	Analyzed By:	JR
Prep Batch:	10901	Date Prepared:	2004-08-10	Prepared By:	JR
QC Batch:	12369	Date Analyzed:	2004-08-18	Analyzed By:	JR
Prep Batch:	10926	Date Prepared:	2004-08-18	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.700	mg/L	1	0.200
Chloride		587	mg/L	50	2.00
Fluoride		<2.00	mg/L	10	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		<0.100	mg/L	1	0.100
Sulfate		3030	mg/L	500	1.00

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12336	Date Analyzed:	2004-08-10	Analyzed By:	JR
Prep Batch:	10901	Date Prepared:	2004-08-10	Prepared By:	JR
QC Batch:	12369	Date Analyzed:	2004-08-18	Analyzed By:	JR
Prep Batch:	10926	Date Prepared:	2004-08-18	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.700	mg/L	1	0.200
Chloride		640	mg/L	100	2.00
Fluoride		<2.00	mg/L	10	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		10.9	mg/L	5	0.100
Sulfate		3900	mg/L	500	1.00

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12336	Date Analyzed:	2004-08-10	Analyzed By:	JR
Prep Batch:	10901	Date Prepared:	2004-08-10	Prepared By:	JR
QC Batch:	12370	Date Analyzed:	2004-08-19	Analyzed By:	JR
Prep Batch:	10927	Date Prepared:	2004-08-19	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		678	mg/L	50	2.00
Fluoride		<2.00	mg/L	10	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		10.7	mg/L	5	0.100
Sulfate		4140	mg/L	500	1.00

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12336	Date Analyzed:	2004-08-10	Analyzed By:	JR
Prep Batch:	10901	Date Prepared:	2004-08-10	Prepared By:	JR
QC Batch:	12370	Date Analyzed:	2004-08-19	Analyzed By:	JR
Prep Batch:	10927	Date Prepared:	2004-08-19	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		702	mg/L	50	2.00
Fluoride		<2.00	mg/L	10	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		10.7	mg/L	5	0.100
Sulfate		2800	mg/L	500	1.00

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12370	Date Analyzed:	2004-08-19	Analyzed By:	JR
Prep Batch:	10927	Date Prepared:	2004-08-19	Prepared By:	JR
QC Batch:	12423	Date Analyzed:	2004-08-31	Analyzed By:	JR
Prep Batch:	10971	Date Prepared:	2004-08-31	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		711	mg/L	50	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		<0.500	mg/L	5	0.100
Sulfate		2800	mg/L	500	1.00

Method Blank (1) QC Batch: 12324

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 12331

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 12331

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 12336

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Fluoride		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 12367

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 12368

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 12369

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 12370

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 12423

Parameter	Flag	Result	Units	RL
Fluoride		<0.200	mg/L	0.2

Laboratory Control Spike (LCS-1) QC Batch: 12324

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.45	2.44	mg/L	1	2.50	<0.0800	98	0	88.5 - 108	4
Chloride	11.6	11.6	mg/L	1	12.5	<0.310	93	0	87.3 - 101	3
Fluoride	2.37	2.39	mg/L	1	2.50	<0.0400	95	1	88.6 - 107	2
Nitrite-N	2.41	2.41	mg/L	1	2.50	<0.0100	96	0	90.5 - 103	2
Nitrate-N	2.41	2.42	mg/L	1	2.50	<0.0100	96	0	87.8 - 107	1.4
Sulfate	12.1	12.1	mg/L	1	12.5	<0.160	97	0	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12331

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.47	2.51	mg/L	1	2.50	<0.0800	99	2	88.5 - 108	4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12331

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.47	2.51	mg/L	1	2.50	<0.0800	99	2	88.5 - 108	4
Chloride	11.8	11.9	mg/L	1	12.5	<0.310	94	1	87.3 - 101	3
Fluoride	2.42	2.45	mg/L	1	2.50	<0.0400	97	1	88.6 - 107	2
Nitrite-N	2.45	2.47	mg/L	1	2.50	<0.0100	98	1	90.5 - 103	2
Nitrate-N	2.45	2.47	mg/L	1	2.50	<0.0100	98	1	87.8 - 107	1.4
Sulfate	12.3	12.4	mg/L	1	12.5	<0.160	98	1	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12336

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.33	2.34	mg/L	1	2.50	<0.0800	93	0	88.5 - 108	4
Fluoride	2.31	2.31	mg/L	1	2.50	<0.0400	92	0	88.6 - 107	2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12367

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.46	2.46	mg/L	1	2.50	<0.0800	98	0	88.5 - 108	4
Chloride	11.6	11.7	mg/L	1	12.5	<0.310	93	1	87.3 - 101	3
Fluoride	2.37	2.39	mg/L	1	2.50	<0.0400	95	1	88.6 - 107	2
Nitrite-N	2.40	2.43	mg/L	1	2.50	<0.0100	96	1	90.5 - 103	2
Nitrate-N	2.41	2.43	mg/L	1	2.50	<0.0100	96	1	87.8 - 107	1.4
Sulfate	12.1	12.2	mg/L	1	12.5	<0.160	97	1	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12368

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.45	2.46	mg/L	1	2.50	<0.0800	98	0	88.5 - 108	4
Chloride	11.7	11.7	mg/L	1	12.5	<0.310	94	0	87.3 - 101	3
Nitrite-N	2.42	2.41	mg/L	1	2.50	<0.0100	97	0	90.5 - 103	2
Nitrate-N	2.44	2.44	mg/L	1	2.50	<0.0100	98	0	87.8 - 107	1.4
Sulfate	12.2	12.2	mg/L	1	12.5	<0.160	98	0	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12369

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.50	2.45	mg/L	1	2.50	<0.0800	100	2	88.5 - 108	4
Chloride	11.7	11.7	mg/L	1	12.5	<0.310	94	0	87.3 - 101	3
Nitrite-N	2.40	2.43	mg/L	1	2.50	<0.0100	96	1	90.5 - 103	2
Nitrate-N	2.43	2.45	mg/L	1	2.50	<0.0100	97	1	87.8 - 107	1.4
Sulfate	12.1	12.3	mg/L	1	12.5	<0.160	97	2	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12370

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.47	2.46	mg/L	1	2.50	<0.0800	99	0	88.5 - 108	4
Chloride	11.7	11.7	mg/L	1	12.5	<0.310	94	0	87.3 - 101	3
Nitrite-N	2.41	2.41	mg/L	1	2.50	<0.0100	96	0	90.5 - 103	2
Nitrate-N	2.43	2.44	mg/L	1	2.50	<0.0100	97	0	87.8 - 107	1.4
Sulfate	12.1	12.2	mg/L	1	12.5	<0.160	97	1	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12423

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	2.37	2.39	mg/L	1	2.50	<0.0400	95	1	88.6 - 107	2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12324

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	12.3	12.5	mg/L	5	2.50	<0.400	98	2	85.2 - 113	3
Chloride	85.7	85.6	mg/L	5	12.5	27.9	92	0	78 - 107	3
Fluoride	12.0	12.1	mg/L	5	2.50	<0.200	96	1	88.3 - 108	2
Nitrite-N	12.1	12.1	mg/L	5	2.50	<0.0500	97	0	89.4 - 105	2
Nitrate-N	15.0	15.0	mg/L	5	2.50	3.2	94	0	78.3 - 109	2
Sulfate	102	101	mg/L	5	12.5	44.4	92	1	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12331

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	12.6	12.6	mg/L	5	2.50	<0.400	101	0	85.2 - 113	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12331

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	12.6	12.6	mg/L	5	2.50	<0.400	101	0	85.2 - 113	3
Chloride	80.2	80.3	mg/L	5	12.5	21.2	94	0	78 - 107	3
Fluoride	12.2	12.2	mg/L	5	2.50	<0.200	98	0	88.3 - 108	2
Nitrite-N	12.3	12.2	mg/L	5	2.50	<0.0500	98	1	89.4 - 105	2
Nitrate-N	14.1	14.1	mg/L	5	2.50	1.94	97	0	78.3 - 109	2
Sulfate	93.7	94.1	mg/L	5	12.5	33.9	96	0	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12336

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	23.9	24.5	mg/L	10	2.50	<0.800	96	2	85.2 - 113	3
Fluoride	25.7	25.8	mg/L	10	2.50	<0.400	102	0	88.3 - 108	2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12367

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1220	1220	mg/L	500	2.50	<40.0	98	0	85.2 - 113	3
Chloride	6400	6340	mg/L	500	12.5	558	93	1	78 - 107	3
Fluoride	1190	1180	mg/L	500	2.50	<20.0	95	1	88.3 - 108	2
Nitrite-N	1210	1200	mg/L	500	2.50	<5.00	97	1	89.4 - 105	2
Nitrate-N	1220	1220	mg/L	500	2.50	15.4	96	0	78.3 - 109	2
Sulfate	10700	10500	mg/L	500	12.5	4820	94	2	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12368

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1240	1240	mg/L	500	2.50	<40.0	99	0	85.2 - 113	3
Chloride	6610	6630	mg/L	500	12.5	806	93	0	78 - 107	3
Nitrite-N	1200	1210	mg/L	500	2.50	<5.00	96	1	89.4 - 105	2
Nitrate-N	1230	1230	mg/L	500	2.50	11.4	97	0	78.3 - 109	2
Sulfate	9080	9100	mg/L	500	12.5	3380	91	0	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12369

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1240	1230	mg/L	500	2.50	<40.0	99	1	85.2 - 113	3
Chloride	6480	6450	mg/L	500	12.5	640	93	0	78 - 107	3
Nitrite-N	1210	1200	mg/L	500	2.50	<5.00	97	1	89.4 - 105	2

continued . . .

matrix spikes continued . . .

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	1230	1220	mg/L	500	2.50	10.9	98	1	78.3 - 109	2
Sulfate	9520	9490	mg/L	500	12.5	3900	90	0	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12370

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1220	1220	mg/L	500	2.50	<40.0	98	0	85.2 - 113	3
Chloride	6490	6460	mg/L	500	12.5	702	93	0	78 - 107	3
Nitrite-N	1200	1190	mg/L	500	2.50	<5.00	96	1	89.4 - 105	2
Nitrate-N	1210	1210	mg/L	500	2.50	10.7	96	0	78.3 - 109	2
Sulfate	8460	8450	mg/L	500	12.5	2800	90	0	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12423

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	11.8	11.8	mg/L	5	2.50	<0.200	94	0	88.3 - 108	2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 12324

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.37	95	90 - 110	2004-08-10
Chloride		mg/L	12.5	11.6	93	90 - 110	2004-08-10
Fluoride		mg/L	2.50	2.39	96	90 - 110	2004-08-10
Nitrite-N	[1]	mg/L	2.50	2.40	96	90 - 110	2004-08-10
Nitrate-N		mg/L	2.50	2.29	92	90 - 110	2004-08-10
Sulfate		mg/L	12.5	11.5	92	90 - 110	2004-08-10

Standard (CCV-1) QC Batch: 12324

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.42	97	90 - 110	2004-08-10
Chloride		mg/L	12.5	11.6	93	85 - 115	2004-08-10
Fluoride		mg/L	2.50	2.37	95	85 - 115	2004-08-10
Nitrite-N		mg/L	2.50	2.40	96	85 - 115	2004-08-10
Nitrate-N		mg/L	2.50	2.30	92	85 - 115	2004-08-10
Sulfate		mg/L	12.5	11.5	92	85 - 115	2004-08-10

[1]Changed spike amount from 1.25 to 2.5 due to current procedure used.

Standard (ICV-1) QC Batch: 12331

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.45	98	90 - 110	2004-08-11

Standard (ICV-1) QC Batch: 12331

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.45	98	90 - 110	2004-08-11
Chloride		mg/L	12.5	11.7	94	90 - 110	2004-08-11
Fluoride		mg/L	2.50	2.43	97	90 - 110	2004-08-11
Nitrite-N		mg/L	2.50	2.43	97	90 - 110	2004-08-11
Nitrate-N		mg/L	2.50	2.33	93	90 - 110	2004-08-11
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-08-11

Standard (CCV-1) QC Batch: 12331

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.46	98	90 - 110	2004-08-11

Standard (CCV-1) QC Batch: 12331

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.46	98	90 - 110	2004-08-11
Chloride		mg/L	12.5	11.8	94	85 - 115	2004-08-11
Fluoride		mg/L	2.50	2.43	97	85 - 115	2004-08-11
Nitrite-N		mg/L	2.50	2.46	98	85 - 115	2004-08-11
Nitrate-N		mg/L	2.50	2.34	94	85 - 115	2004-08-11
Sulfate		mg/L	12.5	11.8	94	85 - 115	2004-08-11

Standard (ICV-1) QC Batch: 12336

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.37	95	90 - 110	2004-08-10
Fluoride		mg/L	2.50	2.33	93	90 - 110	2004-08-10

Standard (CCV-1) QC Batch: 12336

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.36	94	90 - 110	2004-08-10
Fluoride		mg/L	2.50	2.34	94	85 - 115	2004-08-10

Standard (ICV-1) QC Batch: 12367

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	2004-08-12
Chloride		mg/L	12.5	11.6	93	90 - 110	2004-08-12
Fluoride		mg/L	2.50	2.39	96	90 - 110	2004-08-12
Nitrite-N		mg/L	2.50	2.40	96	90 - 110	2004-08-12
Nitrate-N		mg/L	2.50	2.30	92	90 - 110	2004-08-12
Sulfate		mg/L	12.5	11.5	92	90 - 110	2004-08-12

Standard (CCV-1) QC Batch: 12367

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	2004-08-12
Chloride		mg/L	12.5	11.6	93	85 - 115	2004-08-12
Fluoride		mg/L	2.50	2.39	96	85 - 115	2004-08-12
Nitrite-N		mg/L	2.50	2.41	96	85 - 115	2004-08-12
Nitrate-N		mg/L	2.50	2.31	92	85 - 115	2004-08-12
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-08-12

Standard (ICV-1) QC Batch: 12368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	2004-08-13
Chloride		mg/L	12.5	11.6	93	90 - 110	2004-08-13
Nitrite-N		mg/L	2.50	2.40	96	90 - 110	2004-08-13
Nitrate-N		mg/L	2.50	2.30	92	90 - 110	2004-08-13
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-08-13

Standard (CCV-1) QC Batch: 12368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.43	97	90 - 110	2004-08-13
Chloride		mg/L	12.5	11.7	94	85 - 115	2004-08-13
Nitrite-N		mg/L	2.50	2.42	97	85 - 115	2004-08-13
Nitrate-N		mg/L	2.50	2.32	93	85 - 115	2004-08-13
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-08-13

Standard (ICV-1) QC Batch: 12369

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.42	97	90 - 110	2004-08-18
Chloride		mg/L	12.5	11.7	94	90 - 110	2004-08-18
Nitrite-N		mg/L	2.50	2.40	96	90 - 110	2004-08-18
Nitrate-N		mg/L	2.50	2.30	92	90 - 110	2004-08-18
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-08-18

Standard (CCV-1) QC Batch: 12369

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.42	97	90 - 110	2004-08-18
Chloride		mg/L	12.5	11.7	94	85 - 115	2004-08-18
Nitrite-N		mg/L	2.50	2.42	97	85 - 115	2004-08-18
Nitrate-N		mg/L	2.50	2.33	93	85 - 115	2004-08-18
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-08-18

Standard (ICV-1) QC Batch: 12370

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.42	97	90 - 110	2004-08-19
Chloride		mg/L	12.5	11.7	94	90 - 110	2004-08-19
Nitrite-N		mg/L	2.50	2.41	96	90 - 110	2004-08-19
Nitrate-N		mg/L	2.50	2.30	92	90 - 110	2004-08-19
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-08-19

Standard (CCV-1) QC Batch: 12370

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	2004-08-19
Chloride		mg/L	12.5	11.6	93	85 - 115	2004-08-19
Nitrite-N		mg/L	2.50	2.39	96	85 - 115	2004-08-19
Nitrate-N		mg/L	2.50	2.31	92	85 - 115	2004-08-19
Sulfate		mg/L	12.5	11.5	92	85 - 115	2004-08-19

Standard (ICV-1) QC Batch: 12423

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.37	95	90 - 110	2004-08-31

Standard (CCV-1) QC Batch: 12423

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.37	95	85 - 115	2004-08-31

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 16, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12026	Date Analyzed:	2004-08-10	Analyzed By:	MK
Prep Batch:	10627	Date Prepared:	2004-08-10	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.37	s.u.	1	0.00

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12026	Date Analyzed:	2004-08-10	Analyzed By:	MK
Prep Batch:	10627	Date Prepared:	2004-08-10	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.21	s.u.	1	0.00

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12026	Date Analyzed:	2004-08-10	Analyzed By:	MK
Prep Batch:	10627	Date Prepared:	2004-08-10	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.27	s.u.	1	0.00

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12027	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10628	Date Prepared:	2004-08-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.29	s.u.	1	0.00

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12027	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10628	Date Prepared:	2004-08-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.12	s.u.	1	0.00

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12028	Date Analyzed:	2004-08-13	Analyzed By:	MK
Prep Batch:	10630	Date Prepared:	2004-08-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.23	s.u.	1	0.00

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12028	Date Analyzed:	2004-08-13	Analyzed By:	MK
Prep Batch:	10630	Date Prepared:	2004-08-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.12	s.u.	1	0.00

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12028	Date Analyzed:	2004-08-13	Analyzed By:	MK
Prep Batch:	10630	Date Prepared:	2004-08-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.12	s.u.	1	0.00

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12361	Date Analyzed:	2004-08-18	Analyzed By:	MK
Prep Batch:	10915	Date Prepared:	2004-08-18	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		6.98	s.u.	1	0.00

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12361	Date Analyzed:	2004-08-18	Analyzed By:	MK

Prep Batch: 10915 Date Prepared: 2004-08-18 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.02	s.u.	1	0.00

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis: pH Analytical Method: SM 4500-H+ Prep Method: N/A
QC Batch: 12361 Date Analyzed: 2004-08-18 Analyzed By: MK
Prep Batch: 10915 Date Prepared: 2004-08-18 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.13	s.u.	1	0.00

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis: pH Analytical Method: SM 4500-H+ Prep Method: N/A
QC Batch: 12361 Date Analyzed: 2004-08-18 Analyzed By: MK
Prep Batch: 10915 Date Prepared: 2004-08-18 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.03	s.u.	1	0.00

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis: pH Analytical Method: SM 4500-H+ Prep Method: N/A
QC Batch: 12361 Date Analyzed: 2004-08-18 Analyzed By: MK
Prep Batch: 10915 Date Prepared: 2004-08-18 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.01	s.u.	1	0.00

Duplicate (1) QC Batch: 12026

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.33	7.33	s.u.	1	0	

Duplicate (1) QC Batch: 12027

continued . . .

duplicate continued . . .

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.25	7.24	s.u.	1	0	

Duplicate (1) QC Batch: 12028

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.13	7.12	s.u.	1	0	

Duplicate (1) QC Batch: 12361

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	6.83	6.82	s.u.	1	0	

Standard (ICV-1) QC Batch: 12026

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.93	99	98 - 102	2004-08-10

Standard (CCV-1) QC Batch: 12026

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.94	99	98 - 102	2004-08-10

Standard (ICV-1) QC Batch: 12027

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.93	99	98 - 102	2004-08-17

Standard (CCV-1) QC Batch: 12027

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.95	99	98 - 102	2004-08-17

Standard (ICV-1) QC Batch: 12028

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.97	100	98 - 102	2004-08-13

Standard (CCV-1) QC Batch: 12028

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.93	99	98 - 102	2004-08-13

Standard (ICV-1) QC Batch: 12361

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.98	100	98 - 102	2004-08-18

Standard (CCV-1) QC Batch: 12361

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.95	99	98 - 102	2004-08-18

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 15, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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 38 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12105	Date Analyzed:	2004-08-17	Analyzed By:	RC
Prep Batch:	10685	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41182 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.00324	mg/L	0.001	80.0	4	0 - 69.3
Phenol-d5		0.0142	mg/L	0.001	80.0	18	0 - 52.5
Nitrobenzene-d5		0.0516	mg/L	0.001	80.0	64	21.1 - 93.6
2-Fluorobiphenyl		0.0554	mg/L	0.001	80.0	69	25.4 - 87
2,4,6-Tribromophenol		0.0482	mg/L	0.001	80.0	60	14.9 - 110
Terphenyl-d14		0.0581	mg/L	0.001	80.0	73	28.9 - 124

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12105	Date Analyzed:	2004-08-17	Analyzed By:	RC
Prep Batch:	10685	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41254 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41254 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0143	mg/L	0.001	80.0	18	0 - 69.3
Phenol-d5		0.00961	mg/L	0.001	80.0	12	0 - 52.5
Nitrobenzene-d5		0.0372	mg/L	0.001	80.0	46	21.1 - 93.6
2-Fluorobiphenyl		0.0425	mg/L	0.001	80.0	53	25.4 - 87
2,4,6-Tribromophenol		0.0552	mg/L	0.001	80.0	69	14.9 - 110
Terphenyl-d14		0.0522	mg/L	0.001	80.0	65	28.9 - 124

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12105	Date Analyzed:	2004-08-17	Analyzed By:	RC
Prep Batch:	10685	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41256 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0

continued . . .

sample 41256 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0224	mg/L	0.001	80.0	28	0 - 69.3
Phenol-d5		0.0156	mg/L	0.001	80.0	20	0 - 52.5
Nitrobenzene-d5		0.0519	mg/L	0.001	80.0	65	21.1 - 93.6
2-Fluorobiphenyl		0.0576	mg/L	0.001	80.0	72	25.4 - 87
2,4,6-Tribromophenol		0.0497	mg/L	0.001	80.0	62	14.9 - 110
Terphenyl-d14		0.0642	mg/L	0.001	80.0	80	28.9 - 124

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12105	Date Analyzed:	2004-08-17	Analyzed By:	RC
Prep Batch:	10685	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41285 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.0234	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.0917	mg/L	0.001	5.00
1-Methylnaphthalene		0.0816	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		0.00871	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41285 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.0113	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0152	mg/L	0.001	80.0	19	0 - 69.3
Phenol-d5		0.0101	mg/L	0.001	80.0	13	0 - 52.5
Nitrobenzene-d5		0.0371	mg/L	0.001	80.0	46	21.1 - 93.6
2-Fluorobiphenyl		0.0436	mg/L	0.001	80.0	54	25.4 - 87
2,4,6-Tribromophenol		0.0475	mg/L	0.001	80.0	59	14.9 - 110
Terphenyl-d14		0.0525	mg/L	0.001	80.0	66	28.9 - 124

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12105	Date Analyzed:	2004-08-17	Analyzed By:	RC
Prep Batch:	10685	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41282 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41282 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0190	mg/L	0.001	80.0	24	0 - 69.3
Phenol-d5		0.0120	mg/L	0.001	80.0	15	0 - 52.5
Nitrobenzene-d5		0.0460	mg/L	0.001	80.0	58	21.1 - 93.6
2-Fluorobiphenyl		0.0488	mg/L	0.001	80.0	61	25.4 - 87
2,4,6-Tribromophenol		0.0385	mg/L	0.001	80.0	48	14.9 - 110
Terphenyl-d14		0.0578	mg/L	0.001	80.0	72	28.9 - 124

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12105	Date Analyzed:	2004-08-17	Analyzed By:	RC
Prep Batch:	10685	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.0138	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.0503	mg/L	0.001	5.00
1-Methylnaphthalene		0.0592	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41385 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		0.00758	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		0.00517	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.00545	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0143	mg/L	0.001	80.0	18	0 - 69.3
Phenol-d5		0.0120	mg/L	0.001	80.0	15	0 - 52.5
Nitrobenzene-d5		0.0406	mg/L	0.001	80.0	51	21.1 - 93.6
2-Fluorobiphenyl		0.0458	mg/L	0.001	80.0	57	25.4 - 87

continued . . .

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,6-Tribromophenol		0.0443	mg/L	0.001	80.0	55	14.9 - 110
Terphenyl-d14		0.0460	mg/L	0.001	80.0	58	28.9 - 124

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12105	Date Analyzed:	2004-08-17	Analyzed By:	RC
Prep Batch:	10685	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.0154	mg/L	0.001	5.00
1-Methylnaphthalene		0.0422	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41388 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41388 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0132	mg/L	0.001	80.0	16	0 - 69.3
Phenol-d5		0.00928	mg/L	0.001	80.0	12	0 - 52.5
Nitrobenzene-d5		0.0380	mg/L	0.001	80.0	48	21.1 - 93.6
2-Fluorobiphenyl		0.0410	mg/L	0.001	80.0	51	25.4 - 87
2,4,6-Tribromophenol		0.0360	mg/L	0.001	80.0	45	14.9 - 110
Terphenyl-d14		0.0382	mg/L	0.001	80.0	48	28.9 - 124

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12105	Date Analyzed:	2004-08-17	Analyzed By:	RC
Prep Batch:	10685	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0

continued . . .

sample 41390 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41390 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0128	mg/L	0.001	80.0	16	0 - 69.3
Phenol-d5		0.00808	mg/L	0.001	80.0	10	0 - 52.5
Nitrobenzene-d5		0.0422	mg/L	0.001	80.0	53	21.1 - 93.6
2-Fluorobiphenyl		0.0460	mg/L	0.001	80.0	58	25.4 - 87
2,4,6-Tribromophenol		0.0408	mg/L	0.001	80.0	51	14.9 - 110
Terphenyl-d14		0.0480	mg/L	0.001	80.0	60	28.9 - 124

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12208	Date Analyzed:	2004-08-24	Analyzed By:	RC
Prep Batch:	10781	Date Prepared:	2004-08-23	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41702 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.0217	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.0444	mg/L	0.001	5.00
1-Methylnaphthalene		0.0860	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		0.0111	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41702 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		0.00856	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.00972	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0270	mg/L	0.001	80.0	34	0 - 69.3
Phenol-d5		0.0180	mg/L	0.001	80.0	22	0 - 52.5
Nitrobenzene-d5	[1]	0.0776	mg/L	0.001	80.0	97	21.1 - 93.6
2-Fluorobiphenyl	[2]	0.0868	mg/L	0.001	80.0	108	25.4 - 87
2,4,6-Tribromophenol	[3]	0.103	mg/L	0.001	80.0	129	14.9 - 110
Terphenyl-d14		0.0918	mg/L	0.001	80.0	115	28.9 - 124

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12208	Date Analyzed:	2004-08-24	Analyzed By:	RC
Prep Batch:	10781	Date Prepared:	2004-08-23	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.01	5.00
n-Nitrosodimethylamine		<0.0500	mg/L	0.01	5.00
2-Picoline		<0.0500	mg/L	0.01	5.00

continued . . .

[1]Sample surrogate recovery out of limits due to sample matrix.
[2]Sample surrogate recovery out of limits due to sample matrix.
[3]Sample surrogate recovery out of limits due to sample matrix.

sample 41704 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Methyl methanesulfonate		<0.0500	mg/L	0.01	5.00
Ethyl methanesulfonate		<0.0500	mg/L	0.01	5.00
Phenol		<0.0500	mg/L	0.01	5.00
Aniline		<0.0500	mg/L	0.01	5.00
bis(2-chloroethyl)ether		<0.0500	mg/L	0.01	5.00
2-Chlorophenol		<0.0500	mg/L	0.01	5.00
1,3-Dichlorobenzene (meta)		<0.0500	mg/L	0.01	5.00
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.01	5.00
Benzyl alcohol		<0.0500	mg/L	0.01	5.00
1,2-Dichlorobenzene (ortho)		<0.0500	mg/L	0.01	5.00
2-Methylphenol		<0.0500	mg/L	0.01	5.00
bis(2-chloroisopropyl)ether		<0.0500	mg/L	0.01	5.00
4-Methylphenol / 3-Methylphenol		<0.0500	mg/L	0.01	5.00
n-Nitrosodi-n-propylamine		<0.0500	mg/L	0.01	5.00
Hexachloroethane		<0.0500	mg/L	0.01	5.00
Acetophenone		<0.0500	mg/L	0.01	5.00
Nitrobenzene		<0.0500	mg/L	0.01	5.00
n-Nitrosopiperidine		<0.0500	mg/L	0.01	5.00
Isophorone		<0.0500	mg/L	0.01	5.00
2-Nitrophenol		<0.0500	mg/L	0.01	5.00
2,4-Dimethylphenol		<0.0500	mg/L	0.01	5.00
bis(2-chloroethoxy)methane		<0.0500	mg/L	0.01	5.00
2,4-Dichlorophenol		<0.0500	mg/L	0.01	5.00
1,2,4-Trichlorobenzene		<0.0500	mg/L	0.01	5.00
Benzoic acid		<0.200	mg/L	0.01	20.0
Naphthalene		4.63	mg/L	0.01	5.00
a,a-Dimethylphenethylamine		<0.0500	mg/L	0.01	5.00
4-Chloroaniline		<0.0500	mg/L	0.01	5.00
2,6-Dichlorophenol		<0.0500	mg/L	0.01	5.00
Hexachlorobutadiene		<0.0500	mg/L	0.01	5.00
n-Nitroso-di-n-butylamine		<0.0500	mg/L	0.01	5.00
4-Chloro-3-methylphenol		<0.0500	mg/L	0.01	5.00
2-Methylnaphthalene		26.3	mg/L	0.01	5.00
1-Methylnaphthalene		26.6	mg/L	0.01	5.00
1,2,4,5-Tetrachlorobenzene		<0.0500	mg/L	0.01	5.00
Hexachlorocyclopentadiene		<0.0500	mg/L	0.01	5.00
2,4,6-Trichlorophenol		<0.0500	mg/L	0.01	5.00
2,4,5-Trichlorophenol		<0.0500	mg/L	0.01	5.00
2-Chloronaphthalene		<0.0500	mg/L	0.01	5.00
1-Chloronaphthalene		<0.0500	mg/L	0.01	5.00
2-Nitroaniline		<0.0500	mg/L	0.01	5.00
Dimethylphthalate		<0.0500	mg/L	0.01	5.00
Acenaphthylene		<0.0500	mg/L	0.01	5.00
2,6-Dinitrotoluene		<0.0500	mg/L	0.01	5.00
3-Nitroaniline		<0.0500	mg/L	0.01	5.00
Acenaphthene		<0.0500	mg/L	0.01	5.00
2,4-Dinitrophenol		<0.200	mg/L	0.01	20.0
Dibenzofuran		<0.0500	mg/L	0.01	5.00
Pentachlorobenzene		<0.0500	mg/L	0.01	5.00
4-Nitrophenol		<0.0500	mg/L	0.01	5.00
2,4-Dinitrotoluene		<0.0500	mg/L	0.01	5.00

continued . . .

sample 41704 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1-Naphthylamine		<0.0500	mg/L	0.01	5.00
2,3,4,6-Tetrachlorophenol		<0.0500	mg/L	0.01	5.00
2-Naphthylamine		<0.0500	mg/L	0.01	5.00
Fluorene		<0.0500	mg/L	0.01	5.00
4-Chlorophenyl-phenylether		<0.0500	mg/L	0.01	5.00
Diethylphthalate		<0.0500	mg/L	0.01	5.00
4-Nitroaniline		<0.0500	mg/L	0.01	5.00
Diphenylhydrazine		<0.0500	mg/L	0.01	5.00
4,6-Dinitro-2-methylphenol		<0.0500	mg/L	0.01	5.00
Diphenylamine		<0.0500	mg/L	0.01	5.00
4-Bromophenyl-phenylether		<0.0500	mg/L	0.01	5.00
Phenacetin		<0.0500	mg/L	0.01	5.00
Hexachlorobenzene		<0.0500	mg/L	0.01	5.00
4-Aminobiphenyl		<0.0500	mg/L	0.01	5.00
Pentachlorophenol		<0.0500	mg/L	0.01	5.00
Anthracene		0.316	mg/L	0.01	5.00
Pentachloronitrobenzene		<0.0500	mg/L	0.01	5.00
Pronamide		<0.0500	mg/L	0.01	5.00
Phenanthrene		3.75	mg/L	0.01	5.00
Di-n-butylphthalate		<0.0500	mg/L	0.01	5.00
Fluoranthene		<0.0500	mg/L	0.01	5.00
Benzidine		<0.150	mg/L	0.01	15.0
Pyrene		0.323	mg/L	0.01	5.00
p-Dimethylaminoazobenzene		<0.0500	mg/L	0.01	5.00
Butylbenzylphthalate		<0.0500	mg/L	0.01	5.00
Benzo(a)anthracene		<0.0500	mg/L	0.01	5.00
3,3-Dichlorobenzidine		<0.0500	mg/L	0.01	5.00
Chrysene		0.115	mg/L	0.01	5.00
bis(2-ethylhexyl)phthalate		<0.100	mg/L	0.01	10.0
Di-n-octylphthalate		<0.0500	mg/L	0.01	5.00
Benzo(b)fluoranthene		<0.0500	mg/L	0.01	5.00
Benzo(k)fluoranthene		<0.0500	mg/L	0.01	5.00
7,12-Dimethylbenz(a)anthracene		<0.0500	mg/L	0.01	5.00
Benzo(a)pyrene		<0.0500	mg/L	0.01	5.00
3-Methylcholanthrene		<0.0500	mg/L	0.01	5.00
Dibenzo(a,j)acridine		<0.0500	mg/L	0.01	5.00
Indeno(1,2,3-cd)pyrene		<0.0500	mg/L	0.01	5.00
Dibenzo(a,h)anthracene		<0.0500	mg/L	0.01	5.00
Benzo(g,h,i)perylene		<0.0500	mg/L	0.01	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol	[4]	0.851	mg/L	0.01	80.0	106	0 - 69.3
Phenol-d5	[5]	0.509	mg/L	0.01	80.0	64	0 - 52.5
Nitrobenzene-d5	[6]	2.95	mg/L	0.01	80.0	369	21.1 - 93.6
2-Fluorobiphenyl		0.460	mg/L	0.01	80.0	58	25.4 - 87
2,4,6-Tribromophenol		0.420	mg/L	0.01	80.0	52	14.9 - 110
Terphenyl-d14		0.498	mg/L	0.01	80.0	62	28.9 - 124

[4]Sample surrogate recovery out of limits due to sample matrix and dilution.
[5]Sample surrogate recovery out of limits due to sample matrix and dilution.
[6]Sample surrogate recovery out of limits due to sample matrix and dilution.

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12208	Date Analyzed:	2004-08-24	Analyzed By:	RC
Prep Batch:	10781	Date Prepared:	2004-08-23	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.0567	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.162	mg/L	0.001	5.00
1-Methylnaphthalene		0.140	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41886 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		0.00866	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		0.0184	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.0300	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0106	mg/L	0.001	80.0	13	0 - 69.3

continued . . .

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Phenol-d5		0.00969	mg/L	0.001	80.0	12	0 - 52.5
Nitrobenzene-d5		0.0551	mg/L	0.001	80.0	69	21.1 - 93.6
2-Fluorobiphenyl		0.0693	mg/L	0.001	80.0	87	25.4 - 87
2,4,6-Tribromophenol		0.0427	mg/L	0.001	80.0	53	14.9 - 110
Terphenyl-d14		0.0795	mg/L	0.001	80.0	99	28.9 - 124

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12208	Date Analyzed:	2004-08-24	Analyzed By:	RC
Prep Batch:	10781	Date Prepared:	2004-08-23	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.133	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.694	mg/L	0.001	5.00

continued . . .

sample 41888 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1-Methylnaphthalene		0.600	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		0.0448	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		0.0953	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		0.0208	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.159	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 41888 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0327	mg/L	0.001	80.0	41	0 - 69.3
Phenol-d5		0.0202	mg/L	0.001	80.0	25	0 - 52.5
Nitrobenzene-d5	[7]	0.0913	mg/L	0.001	80.0	114	21.1 - 93.6
2-Fluorobiphenyl	[8]	0.0772	mg/L	0.001	80.0	96	25.4 - 87
2,4,6-Tribromophenol	[9]	0.103	mg/L	0.001	80.0	129	14.9 - 110
Terphenyl-d14		0.0910	mg/L	0.001	80.0	114	28.9 - 124

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	12208	Date Analyzed:	2004-08-24	Analyzed By:	RC
Prep Batch:	10781	Date Prepared:	2004-08-23	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00

continued . . .

[7] Sample surrogate recovery out of limits due to sample matrix.
[8] Sample surrogate recovery out of limits due to sample matrix.
[9] Sample surrogate recovery out of limits due to sample matrix.

sample 41890 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		0.0568	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		0.250	mg/L	0.001	5.00
1-Methylnaphthalene		0.260	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		0.0145	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		0.0292	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		0.00594	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		0.0471	mg/L	0.001	5.00

continued . . .

sample 41890 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0276	mg/L	0.001	80.0	34	0 - 69.3
Phenol-d5		0.0170	mg/L	0.001	80.0	21	0 - 52.5
Nitrobenzene-d5	[10]	0.0829	mg/L	0.001	80.0	104	21.1 - 93.6
2-Fluorobiphenyl	[11]	0.0815	mg/L	0.001	80.0	102	25.4 - 87
2,4,6-Tribromophenol	[12]	0.0968	mg/L	0.001	80.0	121	14.9 - 110
Terphenyl-d14		0.0797	mg/L	0.001	80.0	100	28.9 - 124

Method Blank (1) QC Batch: 12105

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5

continued . . .

[10] Sample surrogate recovery out of limits due to sample matrix.
[11] Sample surrogate recovery out of limits due to sample matrix.
[12] Sample surrogate recovery out of limits due to sample matrix.

method blank continued . . .

Parameter	Flag	Result	Units	RL
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.00267	mg/L	0.001	80.0	3	0 - 69.3
Phenol-d5		0.0208	mg/L	0.001	80.0	26	0 - 52.5
Nitrobenzene-d5		0.0510	mg/L	0.001	80.0	64	21.1 - 93.6
2-Fluorobiphenyl		0.0573	mg/L	0.001	80.0	72	25.4 - 87
2,4,6-Tribromophenol		0.0463	mg/L	0.001	80.0	58	14.9 - 110
Terphenyl-d14		0.0628	mg/L	0.001	80.0	78	28.9 - 124

Method Blank (1) QC Batch: 12208

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0516	mg/L	0.001	80.0	64	0 - 69.3
Phenol-d5		0.0349	mg/L	0.001	80.0	44	0 - 52.5
Nitrobenzene-d5		0.0555	mg/L	0.001	80.0	69	21.1 - 93.6
2-Fluorobiphenyl		0.0563	mg/L	0.001	80.0	70	25.4 - 87
2,4,6-Tribromophenol		0.0474	mg/L	0.001	80.0	59	14.9 - 110
Terphenyl-d14		0.0694	mg/L	0.001	80.0	87	28.9 - 124

Laboratory Control Spike (LCS-1) QC Batch: 12105

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	16.8	16.7	mg/L	1	80.0	<0.490	21	0	0 - 52.1	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
2-Chlorophenol	41.7	40.8	mg/L	1	80.0	<1.63	52	2	9.7 - 98.2	20
1,4-Dichlorobenzene (para)	37.1	37.0	mg/L	1	80.0	<1.93	46	0	18.1 - 111	20
n-Nitrosodi-n-propylamine	45.2	44.6	mg/L	1	80.0	<2.26	56	1	36.6 - 121	20
1,2,4-Trichlorobenzene	35.1	34.5	mg/L	1	80.0	<1.52	44	2	20.8 - 112	20
4-Chloro-3-methylphenol	39.8	40.2	mg/L	1	80.0	<1.60	50	1	14.3 - 102	20
Acenaphthene	49.0	49.0	mg/L	1	80.0	<1.58	61	0	32.6 - 123	20
4-Nitrophenol	8.16	9.35	mg/L	1	80.0	<3.83	10	14	0 - 51.9	20
2,4-Dinitrotoluene	34.6	34.8	mg/L	1	80.0	<2.09	43	0	32.6 - 138	20
Pentachlorophenol	24.1	22.3	mg/L	1	80.0	<3.04	30	8	0 - 121	20
Pyrene	49.8	50.6	mg/L	1	80.0	<1.81	62	2	38.4 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	32.4	32.0	mg/L	1	80.0	40	40	0 - 69.3
Phenol-d5	21.9	21.5	mg/L	1	80.0	27	27	0 - 52.5
Nitrobenzene-d5	45.3	45.4	mg/L	1	80.0	57	57	21.1 - 93.6
2-Fluorobiphenyl	58.2	58.2	mg/L	1	80.0	73	73	25.4 - 87
2,4,6-Tribromophenol	50.0	49.2	mg/L	1	80.0	62	62	14.9 - 110
Terphenyl-d14	63.0	64.9	mg/L	1	80.0	79	81	28.9 - 124

Laboratory Control Spike (LCS-1) QC Batch: 12208

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	17.2	30.4	mg/L	1	80.0	<0.490	22	55	0 - 52.1	20
2-Chlorophenol	42.9	73.5	mg/L	1	80.0	<1.63	54	52	9.7 - 98.2	20
1,4-Dichlorobenzene (para)	35.9	65.2	mg/L	1	80.0	<1.93	45	58	18.1 - 111	20
n-Nitrosodi-n-propylamine	47.4	85.2	mg/L	1	80.0	<2.26	59	57	36.6 - 121	20
1,2,4-Trichlorobenzene	35.2	34.9	mg/L	1	80.0	<1.52	44	1	20.8 - 112	20
4-Chloro-3-methylphenol	40.7	41.6	mg/L	1	80.0	<1.60	51	2	14.3 - 102	20
Acenaphthene	49.4	48.4	mg/L	1	80.0	<1.58	62	2	32.6 - 123	20
4-Nitrophenol	8.13	10.6	mg/L	1	80.0	<3.83	10	26	0 - 51.9	20
2,4-Dinitrotoluene	41.1	40.0	mg/L	1	80.0	<2.09	51	3	32.6 - 138	20
Pentachlorophenol	26.0	27.3	mg/L	1	80.0	<3.04	32	5	0 - 121	20
Pyrene	51.1	51.6	mg/L	1	80.0	<1.81	64	1	38.4 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol [13]	32.4	56.9	mg/L	1	80.0	40	71	0 - 69.3
Phenol-d5	22.2	39.3	mg/L	1	80.0	28	49	0 - 52.5
Nitrobenzene-d5	46.7	47.1	mg/L	1	80.0	58	59	21.1 - 93.6
2-Fluorobiphenyl	59.8	57.6	mg/L	1	80.0	75	72	25.4 - 87
2,4,6-Tribromophenol	53.4	52.8	mg/L	1	80.0	67	66	14.9 - 110
Terphenyl-d14	64.9	65.5	mg/L	1	80.0	81	82	28.9 - 124

Matrix Spike (MS-1) QC Batch: 12105

[13]The average of the surrogate compounds shows that the process is in control.

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol		13.5	14.1	mg/L	1	80.0	<0.490	17	4	0 - 59.4	
2-Chlorophenol		37.4	39.3	mg/L	1	80.0	<1.63	47	5	33.87 - 76.65	
1,4-Dichlorobenzene (para)		33.6	34.8	mg/L	1	80.0	<1.93	42	4	5.66 - 106.63	
n-Nitrosodi-n-propylamine		46.3	46.8	mg/L	1	80.0	<2.26	58	1	2.12 - 116.53	
1,2,4-Trichlorobenzene		34.4	35.8	mg/L	1	80.0	<1.52	43	4	8.26 - 101.73	
4-Chloro-3-methylphenol	[14]	39.8	39.4	mg/L	1	80.0	<1.60	50	1	49.08 - 66.06	
Acenaphthene		48.6	50.8	mg/L	1	80.0	<1.58	61	4	10.76 - 107.89	
4-Nitrophenol		8.12	8.39	mg/L	1	80.0	<3.83	10	3	0 - 70.4	
2,4-Dinitrotoluene		38.8	40.2	mg/L	1	80.0	<2.09	48	4	0 - 140	
Pentachlorophenol		22.1	19.9	mg/L	1	80.0	<3.04	28	10	0 - 121	
Pyrene		52.4	54.6	mg/L	1	80.0	<1.81	66	4	13.81 - 106.27	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol	25.3	26.0	mg/L	1	80	32	32	7.07 - 72.13
Phenol-d5	17.4	17.9	mg/L	1	80	22	22	0 - 67.01
Nitrobenzene-d5	44.3	45.1	mg/L	1	80	55	56	32.4 - 110.8
2-Fluorobiphenyl	55.8	59.2	mg/L	1	80	70	74	46.84 - 91.48
2,4,6-Tribromophenol	52.8	52.7	mg/L	1	80	66	66	29.39 - 110.7
Terphenyl-d14	59.0	60.4	mg/L	1	80	74	76	34.1 - 95.34

Matrix Spike (MS-1) QC Batch: 12208

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol		13.6	14.5	mg/L	1	80.0	<0.490	17	6	0 - 59.4	
2-Chlorophenol		39.7	42.8	mg/L	1	80.0	<1.63	50	8	33.87 - 76.65	
1,4-Dichlorobenzene (para)		44.1	46.5	mg/L	1	80.0	<1.93	55	5	5.66 - 106.63	
n-Nitrosodi-n-propylamine	[15][16]	107	93.9	mg/L	1	80.0	<2.26	134	13	2.12 - 116.53	
1,2,4-Trichlorobenzene	[17]	112	40.3	mg/L	1	80.0	<1.52	140	94	8.26 - 101.73	
4-Chloro-3-methylphenol	[18][19]	74.7	94.7	mg/L	1	80.0	<1.60	93	24	49.08 - 66.06	
Acenaphthene	[20][21]	101	97.4	mg/L	1	80.0	<1.58	126	4	10.76 - 107.89	
4-Nitrophenol	[22][23]	100	105	mg/L	1	80.0	<3.83	125	5	0 - 70.4	
2,4-Dinitrotoluene	[24][25]	159	162	mg/L	1	80.0	<2.09	199	2	0 - 140	
Pentachlorophenol		49.5	40.6	mg/L	1	80.0	<3.04	62	20	0 - 121	
Pyrene	[26]	35.0	146	mg/L	1	80.0	<1.81	44	123	13.81 - 106.27	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[14]The average of the matrix spike compounds shows that the process is in control.
[15]Matrix spike recovery out of limits due to sample matrix and dilution.
[16]Matrix spike recovery out of limits due to sample matrix and dilution.
[17]Matrix spike recovery out of limits due to sample matrix and dilution.
[18]Matrix spike recovery out of limits due to sample matrix and dilution.
[19]Matrix spike recovery out of limits due to sample matrix and dilution.
[20]Matrix spike recovery out of limits due to sample matrix and dilution.
[21]Matrix spike recovery out of limits due to sample matrix and dilution.
[22]Matrix spike recovery out of limits due to sample matrix and dilution.
[23]Matrix spike recovery out of limits due to sample matrix and dilution.
[24]Matrix spike recovery out of limits due to sample matrix and dilution.
[25]Matrix spike recovery out of limits due to sample matrix and dilution.
[26]Matrix spike recovery out of limits due to sample matrix and dilution.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol		36.6	37.6	mg/L	1	80	46	47	7.07 - 72.13
Phenol-d5		27.3	27.6	mg/L	1	80	34	34	0 - 67.01
Nitrobenzene-d5	[27][28]	181	96.9	mg/L	1	80	226	121	32.4 - 110.8
2-Fluorobiphenyl	[29]	109	61.7	mg/L	1	80	136	77	46.84 - 91.48
2,4,6-Tribromophenol	[30]	97.0	81.0	mg/L	1	80	121	101	29.39 - 110.7
Terphenyl-d14	[31]	47.1	165	mg/L	1	80	59	206	34.1 - 95.34

Standard (CCV-1) QC Batch: 12105

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	60.7	101	80 - 120	2004-08-17
1,4-Dichlorobenzene (para)		mg/L	60.0	60.3	100	80 - 120	2004-08-17
2-Nitrophenol		mg/L	60.0	62.9	105	80 - 120	2004-08-17
2,4-Dichlorophenol		mg/L	60.0	66.2	110	80 - 120	2004-08-17
Hexachlorobutadiene		mg/L	60.0	65.3	109	80 - 120	2004-08-17
4-Chloro-3-methylphenol		mg/L	60.0	65.2	109	80 - 120	2004-08-17
2,4,6-Trichlorophenol		mg/L	60.0	58.1	97	80 - 120	2004-08-17
Acenaphthene		mg/L	60.0	61.0	102	80 - 120	2004-08-17
Diphenylamine		mg/L	60.0	62.9	105	80 - 120	2004-08-17
Pentachlorophenol		mg/L	60.0	65.9	110	80 - 120	2004-08-17
Fluoranthene		mg/L	60.0	58.0	97	80 - 120	2004-08-17
Di-n-octylphthalate		mg/L	60.0	63.0	105	80 - 120	2004-08-17
Benzo(a)pyrene		mg/L	60.0	61.6	103	80 - 120	2004-08-17

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		59.1	mg/L	1	60.0	98	80 - 120
Phenol-d5		59.3	mg/L	1	60.0	99	80 - 120
Nitrobenzene-d5		59.9	mg/L	1	60.0	100	80 - 120
2-Fluorobiphenyl		61.4	mg/L	1	60.0	102	80 - 120
2,4,6-Tribromophenol		61.6	mg/L	1	60.0	103	80 - 120
Terphenyl-d14		61.7	mg/L	1	60.0	103	80 - 120

Standard (CCV-2) QC Batch: 12105

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	62.4	104	80 - 120	2004-08-17
1,4-Dichlorobenzene (para)		mg/L	60.0	60.7	101	80 - 120	2004-08-17
2-Nitrophenol		mg/L	60.0	52.4	87	80 - 120	2004-08-17
2,4-Dichlorophenol		mg/L	60.0	65.6	109	80 - 120	2004-08-17
Hexachlorobutadiene		mg/L	60.0	63.6	106	80 - 120	2004-08-17
4-Chloro-3-methylphenol		mg/L	60.0	62.6	104	80 - 120	2004-08-17

continued . . .

[27]Matrix spike recovery out of limits due to sample matrix and dilution.
[28]Matrix spike recovery out of limits due to sample matrix and dilution.
[29]Matrix spike recovery out of limits due to sample matrix and dilution.
[30]Matrix spike recovery out of limits due to sample matrix and dilution.
[31]Matrix spike recovery out of limits due to sample matrix and dilution.

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
2,4,6-Trichlorophenol		mg/L	60.0	56.2	94	80 - 120	2004-08-17
Acenaphthene		mg/L	60.0	60.2	100	80 - 120	2004-08-17
Diphenylamine		mg/L	60.0	63.6	106	80 - 120	2004-08-17
Pentachlorophenol		mg/L	60.0	55.8	93	80 - 120	2004-08-17
Fluoranthene		mg/L	60.0	59.8	100	80 - 120	2004-08-17
Di-n-octylphthalate		mg/L	60.0	61.0	102	80 - 120	2004-08-17
Benzo(a)pyrene		mg/L	60.0	61.7	103	80 - 120	2004-08-17

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		58.5	mg/L	1	60.0	98	80 - 120
Phenol-d5		60.9	mg/L	1	60.0	102	80 - 120
Nitrobenzene-d5		59.8	mg/L	1	60.0	100	80 - 120
2-Fluorobiphenyl		62.8	mg/L	1	60.0	105	80 - 120
2,4,6-Tribromophenol		59.9	mg/L	1	60.0	100	80 - 120
Terphenyl-d14		62.4	mg/L	1	60.0	104	80 - 120

Standard (CCV-1) QC Batch: 12208

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	64.9	108	80 - 120	2004-08-24
1,4-Dichlorobenzene (para)		mg/L	60.0	61.1	102	80 - 120	2004-08-24
2-Nitrophenol		mg/L	60.0	54.2	90	80 - 120	2004-08-24
2,4-Dichlorophenol		mg/L	60.0	70.8	118	80 - 120	2004-08-24
Hexachlorobutadiene		mg/L	60.0	65.1	108	80 - 120	2004-08-24
4-Chloro-3-methylphenol		mg/L	60.0	64.9	108	80 - 120	2004-08-24
2,4,6-Trichlorophenol		mg/L	60.0	53.9	90	80 - 120	2004-08-24
Acenaphthene		mg/L	60.0	61.1	102	80 - 120	2004-08-24
Diphenylamine		mg/L	60.0	64.3	107	80 - 120	2004-08-24
Pentachlorophenol		mg/L	60.0	58.4	97	80 - 120	2004-08-24
Fluoranthene		mg/L	60.0	61.2	102	80 - 120	2004-08-24
Di-n-octylphthalate		mg/L	60.0	59.3	99	80 - 120	2004-08-24
Benzo(a)pyrene		mg/L	60.0	62.5	104	80 - 120	2004-08-24

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		60.1	mg/L	1	60.0	100	80 - 120
Phenol-d5		63.9	mg/L	1	60.0	106	80 - 120
Nitrobenzene-d5		59.7	mg/L	1	60.0	99	80 - 120
2-Fluorobiphenyl		62.3	mg/L	1	60.0	104	80 - 120
2,4,6-Tribromophenol		59.9	mg/L	1	60.0	100	80 - 120
Terphenyl-d14		64.6	mg/L	1	60.0	108	80 - 120

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 15, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12081	Date Analyzed:	2004-08-11	Analyzed By:	JG
Prep Batch:	10677	Date Prepared:	2004-08-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		27900	mg/L	1	5.00

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12081	Date Analyzed:	2004-08-11	Analyzed By:	JG
Prep Batch:	10677	Date Prepared:	2004-08-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		7070	mg/L	1	5.00

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12081	Date Analyzed:	2004-08-11	Analyzed By:	JG
Prep Batch:	10677	Date Prepared:	2004-08-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		14200	mg/L	1	5.00

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12218	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10795	Date Prepared:	2004-08-17	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		8730	mg/L	1	5.00

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12218	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10795	Date Prepared:	2004-08-17	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		10100	mg/L	1	5.00

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12218	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10795	Date Prepared:	2004-08-17	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		8570	mg/L	1	5.00

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12218	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10795	Date Prepared:	2004-08-17	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		11800	mg/L	1	5.00

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12218	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10795	Date Prepared:	2004-08-17	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		8200	mg/L	1	5.00

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12365	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10920	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		7410	mg/L	1	5.00

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	12365	Date Analyzed:	2004-08-23	Analyzed By:	JG

Prep Batch: 10920 Date Prepared: 2004-08-23 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		7970	mg/L	1	5.00

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A
QC Batch: 12365 Date Analyzed: 2004-08-23 Analyzed By: JG
Prep Batch: 10920 Date Prepared: 2004-08-23 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		8910	mg/L	1	5.00

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A
QC Batch: 12365 Date Analyzed: 2004-08-23 Analyzed By: JG
Prep Batch: 10920 Date Prepared: 2004-08-23 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		7680	mg/L	1	5.00

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A
QC Batch: 12365 Date Analyzed: 2004-08-23 Analyzed By: JG
Prep Batch: 10920 Date Prepared: 2004-08-23 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		7640	mg/L	1	5.00

Method Blank (1) QC Batch: 12081

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		< 5.00	mg/L	5

Method Blank (1) QC Batch: 12218

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Method Blank (1) QC Batch: 12365

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Duplicate (1) QC Batch: 12081

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	410	418	mg/L	1	2	8.4

Duplicate (1) QC Batch: 12218

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	8150	8200	mg/L	1	0	8.4

Duplicate (1) QC Batch: 12365

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	3730	3750	mg/L	1	0	8.4

Standard (ICV-1) QC Batch: 12081

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1020	102	92 - 107	2004-08-11

Standard (CCV-1) QC Batch: 12081

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	976	98	92 - 107	2004-08-11

Standard (ICV-1) QC Batch: 12218

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1020	102	92 - 107	2004-08-17

Standard (CCV-1) QC Batch: 12218

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1010	101	92 - 107	2004-08-17

Standard (ICV-1) QC Batch: 12365

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1010	101	92 - 107	2004-08-23

Standard (CCV-1) QC Batch: 12365

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	996	100	92 - 107	2004-08-23

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 15, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11977	Date Analyzed:	2004-08-13	Analyzed By:	WB
Prep Batch:	10585	Date Prepared:	2004-08-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4	mg/L	1	4.00

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	12073	Date Analyzed:	2004-08-18	Analyzed By:	WB
Prep Batch:	10668	Date Prepared:	2004-08-16	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.0	mg/L	1	4.00

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11977	Date Analyzed:	2004-08-13	Analyzed By:	WB
Prep Batch:	10585	Date Prepared:	2004-08-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4	mg/L	1	4.00

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11977	Date Analyzed:	2004-08-13	Analyzed By:	WB
Prep Batch:	10585	Date Prepared:	2004-08-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4	mg/L	1	4.00

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	12073	Date Analyzed:	2004-08-18	Analyzed By:	WB
Prep Batch:	10668	Date Prepared:	2004-08-16	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.0	mg/L	1	4.00

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	12073	Date Analyzed:	2004-08-18	Analyzed By:	WB
Prep Batch:	10668	Date Prepared:	2004-08-16	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.0	mg/L	1	4.00

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	12073	Date Analyzed:	2004-08-18	Analyzed By:	WB
Prep Batch:	10668	Date Prepared:	2004-08-16	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.0	mg/L	1	4.00

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	12073	Date Analyzed:	2004-08-18	Analyzed By:	WB
Prep Batch:	10668	Date Prepared:	2004-08-16	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.0	mg/L	1	4.00

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	12144	Date Analyzed:	2004-08-20	Analyzed By:	WB
Prep Batch:	10725	Date Prepared:	2004-08-20	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.0	mg/L	1	4.00

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	12144	Date Analyzed:	2004-08-20	Analyzed By:	WB

Prep Batch: 10725 Date Prepared: 2004-08-20 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.0	mg/L	1	4.00

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A
QC Batch: 12282 Date Analyzed: 2004-08-25 Analyzed By: WB
Prep Batch: 10852 Date Prepared: 2004-08-25 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4	mg/L	1	4.00

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A
QC Batch: 12282 Date Analyzed: 2004-08-25 Analyzed By: WB
Prep Batch: 10852 Date Prepared: 2004-08-25 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4	mg/L	1	4.00

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A
QC Batch: 12282 Date Analyzed: 2004-08-25 Analyzed By: WB
Prep Batch: 10852 Date Prepared: 2004-08-25 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4	mg/L	1	4.00

Method Blank (1) QC Batch: 11977

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		< 4	mg/L	4

Method Blank (1) QC Batch: 12073

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		< 4.0	mg/L	4

Method Blank (1) QC Batch: 12144

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		< 4	mg/L	4

Method Blank (1) QC Batch: 12282

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		< 4	mg/L	4

Laboratory Control Spike (LCS-1) QC Batch: 11977

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	52.4	49.3	mg/L	1	50.0	<4.00	105	6	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12073

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	40.3	49.3	mg/L	1	50.0	<4.00	81	20	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12144

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	45.1	43.1	mg/L	1	50.0	<4.00	90	4	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12282

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	45.8	38.9	mg/L	1	50.0	<4.00	92	16	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11977

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	47.3	45.9	mg/L	1	50.0	<4.00	95	3	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12073

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	47.3	44.2	mg/L	1	50.0	<4.00	95	7	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12144

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	46.2	46.8	mg/L	1	50.0	<4.00	92	1	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12282

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	45.6	42.8	mg/L	1	50.0	<4.00	91	6	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11977

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.87	97	85 - 115	2004-08-13

Standard (CCV-1) QC Batch: 11977

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.76	95	85 - 115	2004-08-13

Standard (ICV-1) QC Batch: 12073

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.42	88	85 - 115	2004-08-18

Standard (CCV-1) QC Batch: 12073

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.54	91	85 - 115	2004-08-18

Standard (ICV-1) QC Batch: 12144

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.76	95	85 - 115	2004-08-20

Standard (CCV-1) QC Batch: 12144

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.87	97	85 - 115	2004-08-20

Standard (ICV-1) QC Batch: 12282

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.82	96	85 - 115	2004-08-25

Standard (CCV-1) QC Batch: 12282

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.70	94	85 - 115	2004-08-25

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 16, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11995	Date Analyzed:	2004-08-15	Analyzed By:	RC
Prep Batch:	10590	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		2.09	mg/L	1	1.00

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11995	Date Analyzed:	2004-08-15	Analyzed By:	RC
Prep Batch:	10590	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		4.88	mg/L	1	1.00

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11995	Date Analyzed:	2004-08-15	Analyzed By:	RC
Prep Batch:	10590	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11995	Date Analyzed:	2004-08-15	Analyzed By:	RC
Prep Batch:	10590	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		2.87	mg/L	1	1.00

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11995	Date Analyzed:	2004-08-15	Analyzed By:	RC
Prep Batch:	10590	Date Prepared:	2004-08-15	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	12188	Date Analyzed:	2004-08-23	Analyzed By:	RC
Prep Batch:	10766	Date Prepared:	2004-08-23	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		10.7	mg/L	1	1.00

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	12188	Date Analyzed:	2004-08-23	Analyzed By:	RC
Prep Batch:	10766	Date Prepared:	2004-08-23	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		8.29	mg/L	1	1.00

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	12188	Date Analyzed:	2004-08-23	Analyzed By:	RC
Prep Batch:	10766	Date Prepared:	2004-08-23	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		366	mg/L	1	1.00

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	12188	Date Analyzed:	2004-08-23	Analyzed By:	RC
Prep Batch:	10766	Date Prepared:	2004-08-23	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		13.0	mg/L	1	1.00

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	12188	Date Analyzed:	2004-08-23	Analyzed By:	RC

Prep Batch: 10766 Date Prepared: 2004-08-23 Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		9.85	mg/L	1	1.00

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis: TOC Analytical Method: E 415.1 Prep Method: N/A
QC Batch: 12188 Date Analyzed: 2004-08-23 Analyzed By: RC
Prep Batch: 10766 Date Prepared: 2004-08-23 Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		10.1	mg/L	1	1.00

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis: TOC Analytical Method: E 415.1 Prep Method: N/A
QC Batch: 12447 Date Analyzed: 2004-08-31 Analyzed By: RC
Prep Batch: 10999 Date Prepared: 2004-08-31 Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		22.9	mg/L	1	1.00

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis: TOC Analytical Method: E 415.1 Prep Method: N/A
QC Batch: 12447 Date Analyzed: 2004-08-31 Analyzed By: RC
Prep Batch: 10999 Date Prepared: 2004-08-31 Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		23.5	mg/L	1	1.00

Method Blank (1) QC Batch: 11995

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Method Blank (1) QC Batch: 12188

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Method Blank (1) QC Batch: 12447

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 11995

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	4.44	4.61	mg/L	1	5.00	<0.382	89	4	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12188

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	5.13	5.02	mg/L	1	5.00	<0.382	103	2	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12447

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	4.42	4.51	mg/L	1	5.00	<0.382	88	2	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11995

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	29.4	31.5	mg/L	1	5.00	26.7	54	7	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12188

continued . . .

matrix spikes continued . . .

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon [12]	21.6	20.6	mg/L	1	5.00	10.1	230	5	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12447

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	27.3	28.0	mg/L	1	5.00	23.5	76	2	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11995

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.41	88	85 - 115	2004-08-15

Standard (CCV-1) QC Batch: 11995

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.52	90	85 - 115	2004-08-15

Standard (ICV-1) QC Batch: 12188

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.18	104	85 - 115	2004-08-23

Standard (CCV-1) QC Batch: 12188

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.06	101	85 - 115	2004-08-23

Standard (ICV-1) QC Batch: 12447

[1]Matrix spike result out of limits due to sample matrix.
[2]Matrix spike result out of limits due to sample matrix.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.50	90	85 - 115	2004-08-31

Standard (CCV-1) QC Batch: 12447

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.66	93	85 - 115	2004-08-31

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 16, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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 21 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		3.53	mg/L	1	0.00500
Total Barium		0.0250	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		0.00300	mg/L	1	0.00100
Total Cobalt		0.0110	mg/L	1	0.00500
Total Chromium		0.00500	mg/L	1	0.00500
Total Copper		0.0250	mg/L	1	0.00500
Total Iron		0.975	mg/L	1	0.0500
Total Manganese		0.0670	mg/L	1	0.0250
Total Molybdenum		0.457	mg/L	1	0.0500
Total Nickel		1.28	mg/L	1	0.00500
Total Phosphorous		0.101	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.265	mg/L	1	0.0100
Total Silica		18.9	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		11.2	mg/L	1	0.0100
Total Vanadium		<0.00500	mg/L	1	0.00500
Total Zinc		0.0180	mg/L	1	0.0100
Total Lithium		1.78	mg/L	1	0.00500

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12118	Date Analyzed:	2004-08-20	Analyzed By:	RR
Prep Batch:	10684	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		3.90	mg/L	1	0.00500
Total Barium		0.0320	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		<0.00500	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Iron		0.835	mg/L	1	0.0500
Total Manganese		0.245	mg/L	1	0.0250
Total Molybdenum		0.137	mg/L	1	0.0500
Total Nickel		0.0120	mg/L	1	0.00500

continued . . .

sample 41254 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		28.2	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		6.80	mg/L	1	0.0100
Total Vanadium		0.0210	mg/L	1	0.00500
Total Zinc		0.0590	mg/L	1	0.0100

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12118	Date Analyzed:	2004-08-20	Analyzed By:	RR
Prep Batch:	10684	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		1.96	mg/L	1	0.00500
Total Barium		0.0120	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		0.00800	mg/L	1	0.00500
Total Chromium		1.44	mg/L	1	0.00500
Total Copper		0.0920	mg/L	1	0.00500
Total Iron		3.29	mg/L	1	0.0500
Total Manganese		0.101	mg/L	1	0.0250
Total Molybdenum		<0.0500	mg/L	1	0.0500
Total Nickel		0.867	mg/L	1	0.00500
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		40.9	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		11.7	mg/L	1	0.0100
Total Vanadium		0.0290	mg/L	1	0.00500
Total Zinc		0.0180	mg/L	1	0.0100

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12118	Date Analyzed:	2004-08-20	Analyzed By:	RR
Prep Batch:	10684	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		6.14	mg/L	1	0.00500
Total Barium		0.0290	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		0.00600	mg/L	1	0.00500
Total Copper		0.0450	mg/L	1	0.00500
Total Iron		0.537	mg/L	1	0.0500
Total Manganese		0.967	mg/L	1	0.0250
Total Molybdenum		0.526	mg/L	1	0.0500
Total Nickel		0.0200	mg/L	1	0.00500
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		31.0	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		5.48	mg/L	1	0.0100
Total Vanadium		0.0300	mg/L	1	0.00500
Total Zinc		0.0130	mg/L	1	0.0100

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12118	Date Analyzed:	2004-08-20	Analyzed By:	RR
Prep Batch:	10684	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		0.149	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		2.30	mg/L	1	0.00500
Total Barium		0.0230	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		0.0140	mg/L	1	0.00500
Total Chromium		1.08	mg/L	1	0.00500
Total Copper		0.0300	mg/L	1	0.00500
Total Iron		2.46	mg/L	1	0.0500
Total Manganese		0.211	mg/L	1	0.0250
Total Molybdenum		0.213	mg/L	1	0.0500
Total Nickel		1.42	mg/L	1	0.00500
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		26.3	mg/L	1	0.0500
Total Tin		0.180	mg/L	1	0.0250
Total Strontium		11.2	mg/L	1	0.0100

continued . . .

sample 41282 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Vanadium		0.0150	mg/L	1	0.00500
Total Zinc		0.0210	mg/L	1	0.0100

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12118	Date Analyzed:	2004-08-20	Analyzed By:	RR
Prep Batch:	10684	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		0.364	mg/L	1	0.00500
Total Boron		7.80	mg/L	1	0.00500
Total Barium		0.0870	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		0.0120	mg/L	1	0.00500
Total Chromium		<0.00500	mg/L	1	0.00500
Total Copper		0.00500	mg/L	1	0.00500
Total Iron		0.232	mg/L	1	0.0500
Total Manganese		0.544	mg/L	1	0.0250
Total Molybdenum		0.374	mg/L	1	0.0500
Total Nickel		0.0700	mg/L	1	0.00500
Total Phosphorous		0.0750	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		42.7	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		4.56	mg/L	1	0.0100
Total Vanadium		0.0280	mg/L	1	0.00500
Total Zinc		0.0130	mg/L	1	0.0100

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12118	Date Analyzed:	2004-08-20	Analyzed By:	RR
Prep Batch:	10684	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		0.227	mg/L	1	0.00500
Total Boron		7.42	mg/L	1	0.00500
Total Barium		0.0950	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250

continued . . .

sample 41388 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		0.0130	mg/L	1	0.00500
Total Chromium		<0.00500	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Iron		0.170	mg/L	1	0.0500
Total Manganese		0.515	mg/L	1	0.0250
Total Molybdenum		0.266	mg/L	1	0.0500
Total Nickel		0.0640	mg/L	1	0.00500
Total Phosphorous		0.0870	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		35.9	mg/L	1	0.0500
Total Tin		0.102	mg/L	1	0.0250
Total Strontium		4.54	mg/L	1	0.0100
Total Vanadium		0.0200	mg/L	1	0.00500
Total Zinc		0.0140	mg/L	1	0.0100

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12118	Date Analyzed:	2004-08-20	Analyzed By:	RR
Prep Batch:	10684	Date Prepared:	2004-08-18	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		9.61	mg/L	1	0.00500
Total Barium		<0.0100	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		0.00800	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Iron		0.599	mg/L	1	0.0500
Total Manganese		0.903	mg/L	1	0.0250
Total Molybdenum		0.109	mg/L	1	0.0500
Total Nickel		0.169	mg/L	1	0.00500
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		46.8	mg/L	1	0.0500
Total Tin		0.0370	mg/L	1	0.0250
Total Strontium		3.56	mg/L	1	0.0100
Total Vanadium		0.0320	mg/L	1	0.00500
Total Zinc		0.0180	mg/L	1	0.0100

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12140	Date Analyzed:	2004-08-23	Analyzed By:	RR
Prep Batch:	10711	Date Prepared:	2004-08-21	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		6.70	mg/L	1	0.00500
Total Barium		0.0290	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		0.0190	mg/L	1	0.00500
Total Chromium		<0.00500	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Iron		2.04	mg/L	1	0.0500
Total Manganese		1.25	mg/L	1	0.0250
Total Molybdenum		<0.0500	mg/L	1	0.0500
Total Nickel		0.0880	mg/L	1	0.00500
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		34.3	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		4.67	mg/L	1	0.0100
Total Vanadium		0.00500	mg/L	1	0.00500
Total Zinc		0.0180	mg/L	1	0.0100

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12140	Date Analyzed:	2004-08-23	Analyzed By:	RR
Prep Batch:	10711	Date Prepared:	2004-08-21	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		5.57	mg/L	1	0.00500
Total Barium		0.0530	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		0.00200	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		<0.00500	mg/L	1	0.00500
Total Copper		0.0120	mg/L	1	0.00500
Total Iron		<0.0500	mg/L	1	0.0500
Total Manganese		0.131	mg/L	1	0.0250
Total Molybdenum		0.174	mg/L	1	0.0500
Total Nickel		0.0120	mg/L	1	0.00500
Total Phosphorous		0.0900	mg/L	1	0.0500

continued . . .

sample 41704 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		32.4	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		5.30	mg/L	1	0.0100
Total Vanadium		0.00500	mg/L	1	0.00500
Total Zinc		0.0190	mg/L	1	0.0100

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12213	Date Analyzed:	2004-08-24	Analyzed By:	RR
Prep Batch:	10733	Date Prepared:	2004-08-23	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		0.105	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		7.40	mg/L	1	0.00500
Total Barium		0.0420	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		0.0150	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Iron		0.194	mg/L	1	0.0500
Total Manganese		0.136	mg/L	1	0.0250
Total Molybdenum		0.142	mg/L	1	0.0500
Total Nickel		0.0280	mg/L	1	0.00500
Total Phosphorous		0.119	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		41.3	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		4.64	mg/L	1	0.0100
Total Vanadium		0.00800	mg/L	1	0.00500
Total Zinc		0.0210	mg/L	1	0.0100

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12213	Date Analyzed:	2004-08-24	Analyzed By:	RR
Prep Batch:	10733	Date Prepared:	2004-08-23	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300

continued . . .

sample 41888 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		6.30	mg/L	1	0.00500
Total Barium		0.0200	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		0.00200	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		<0.00500	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Iron		5.42	mg/L	1	0.0500
Total Manganese		0.353	mg/L	1	0.0250
Total Molybdenum		0.0760	mg/L	1	0.0500
Total Nickel		0.0940	mg/L	1	0.00500
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		39.1	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		3.97	mg/L	1	0.0100
Total Vanadium		<0.00500	mg/L	1	0.00500
Total Zinc		0.0130	mg/L	1	0.0100

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	12213	Date Analyzed:	2004-08-24	Analyzed By:	RR
Prep Batch:	10733	Date Prepared:	2004-08-23	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		4.96	mg/L	1	0.00500
Total Barium		0.0150	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		<0.00500	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Iron		4.21	mg/L	1	0.0500
Total Manganese		0.271	mg/L	1	0.0250
Total Molybdenum		<0.0500	mg/L	1	0.0500
Total Nickel		0.0710	mg/L	1	0.00500
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		30.0	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250

continued . . .

sample 41890 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Strontium		3.00	mg/L	1	0.0100
Total Vanadium		<0.00500	mg/L	1	0.00500
Total Zinc		0.0140	mg/L	1	0.0100

Method Blank (1) QC Batch: 12118

Parameter	Flag	Result	Units	RL
Total Silver		<0.00300	mg/L	0.003
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.00500	mg/L	0.005
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.0100	mg/L	0.01
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00100	mg/L	0.001
Total Cobalt		<0.00500	mg/L	0.005
Total Chromium		<0.00500	mg/L	0.005
Total Copper		<0.00500	mg/L	0.005
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.00500	mg/L	0.005
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0100	mg/L	0.01
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.0100	mg/L	0.01
Total Vanadium		<0.00500	mg/L	0.005
Total Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 12140

Parameter	Flag	Result	Units	RL
Total Silver		<0.00300	mg/L	0.003
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.00500	mg/L	0.005
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.0100	mg/L	0.01
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00100	mg/L	0.001
Total Cobalt		<0.00500	mg/L	0.005
Total Chromium		<0.00500	mg/L	0.005
Total Copper		<0.00500	mg/L	0.005
Total Iron		<0.0500	mg/L	0.05

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.00500	mg/L	0.005
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0100	mg/L	0.01
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.0100	mg/L	0.01
Total Vanadium		<0.00500	mg/L	0.005
Total Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 12213

Parameter	Flag	Result	Units	RL
Total Silver		<0.00300	mg/L	0.003
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.00500	mg/L	0.005
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.0100	mg/L	0.01
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00100	mg/L	0.001
Total Cobalt		<0.00500	mg/L	0.005
Total Chromium		<0.00500	mg/L	0.005
Total Copper		<0.00500	mg/L	0.005
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.00500	mg/L	0.005
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0100	mg/L	0.01
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.0100	mg/L	0.01
Total Vanadium		<0.00500	mg/L	0.005
Total Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 12665

Parameter	Flag	Result	Units	RL
Total Silver		<0.00300	mg/L	0.003
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.00500	mg/L	0.005
Total Boron		<0.00500	mg/L	0.005

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Total Barium		<0.0100	mg/L	0.01
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00100	mg/L	0.001
Total Cobalt		<0.00500	mg/L	0.005
Total Chromium		<0.00500	mg/L	0.005
Total Copper		<0.00500	mg/L	0.005
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.00500	mg/L	0.005
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0100	mg/L	0.01
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.0100	mg/L	0.01
Total Vanadium		<0.00500	mg/L	0.005
Total Zinc		<0.0100	mg/L	0.01
Total Lithium		<0.00500	mg/L	0.005

Laboratory Control Spike (LCS-1) QC Batch: 12118

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.131	0.128	mg/L	1	0.125	<0.00274	105	2	85 - 115	20
Total Aluminum		1.03	1.03	mg/L	1	1.00	<0.0133	103	0	85 - 115	20
Total Arsenic		0.455	0.438	mg/L	1	0.500	<0.00489	91	4	85 - 115	20
Total Boron		0.0560	0.0530	mg/L	1	0.0500	<0.00544	112	6	85 - 115	20
Total Barium		1.02	1.02	mg/L	1	1.00	<0.000450	102	0	85 - 114	20
Total Beryllium		0.0270	0.0250	mg/L	1	0.0250	<0.000178	108	8	85 - 115	20
Total Cadmium		0.251	0.250	mg/L	1	0.250	<0.000268	100	0	86 - 115	20
Total Cobalt		0.267	0.264	mg/L	1	0.250	<0.00293	107	1	87 - 113	20
Total Chromium		0.0990	0.101	mg/L	1	0.100	<0.00357	99	2	85 - 115	20
Total Copper		0.140	0.135	mg/L	1	0.125	<0.00127	112	4	85 - 113	20
Total Iron		0.508	0.495	mg/L	1	0.500	<0.00220	102	2	85 - 115	20
Total Manganese		0.264	0.261	mg/L	1	0.250	<0.000297	106	1	85 - 110	20
Total Molybdenum		0.500	0.497	mg/L	1	0.500	<0.00690	100	1	85 - 115	20
Total Nickel		0.274	0.272	mg/L	1	0.250	<0.000450	110	1	85 - 112	20
Total Phosphorous		0.487	0.506	mg/L	1	0.500	<0.0229	97	4	85 - 115	20
Total Lead		0.497	0.505	mg/L	1	0.500	<0.00698	99	2	86.1 - 112	20
Total Selenium		0.465	0.462	mg/L	1	0.500	<0.00556	93	1	75 - 125	20
Total Silica		0.505	0.493	mg/L	1	0.500	<0.00490	101	2	85 - 115	20
Total Tin	[1]	0.326	0.293	mg/L	1	0.300	<0.00759	109	11	85 - 115	20
Total Strontium		0.0500	0.0500	mg/L	1	0.0500	<0.000281	100	0	85 - 115	20
Total Vanadium		0.260	0.257	mg/L	1	0.250	<0.00105	104	1	85 - 115	20
Total Zinc		0.263	0.259	mg/L	1	0.250	<0.00300	105	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[1]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.

Laboratory Control Spike (LCS-1) QC Batch: 12140

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.125	0.125	mg/L	1	0.125	<0.00274	100	0	85 - 115	20
Total Aluminum	0.966	0.999	mg/L	1	1.00	<0.0133	97	3	85 - 115	20
Total Arsenic	0.477	0.454	mg/L	1	0.500	<0.00489	95	5	85 - 115	20
Total Boron	0.0497	0.0490	mg/L	1	0.0500	<0.00544	99	1	85 - 115	20
Total Barium	0.999	0.997	mg/L	1	1.00	<0.000450	100	0	85 - 114	20
Total Beryllium	0.0253	0.0253	mg/L	1	0.0250	<0.000178	101	0	85 - 115	20
Total Cadmium	0.244	0.249	mg/L	1	0.250	<0.000268	98	2	86 - 115	20
Total Cobalt	0.262	0.264	mg/L	1	0.250	<0.00293	105	1	87 - 113	20
Total Chromium	0.0970	0.0990	mg/L	1	0.100	<0.00357	97	2	85 - 115	20
Total Copper	0.129	0.130	mg/L	1	0.125	<0.00127	103	1	85 - 113	20
Total Iron	0.473	0.476	mg/L	1	0.500	<0.00220	95	1	85 - 115	20
Total Manganese	0.255	0.257	mg/L	1	0.250	<0.000297	102	1	85 - 110	20
Total Molybdenum	0.469	0.480	mg/L	1	0.500	<0.00690	94	2	85 - 115	20
Total Nickel	0.268	0.268	mg/L	1	0.250	<0.000450	107	0	85 - 112	20
Total Phosphorous	0.476	0.472	mg/L	1	0.500	<0.0229	95	1	85 - 115	20
Total Lead	0.495	0.487	mg/L	1	0.500	<0.00698	99	2	86.1 - 112	20
Total Selenium	0.422	0.424	mg/L	1	0.500	<0.00556	84	0	75 - 125	20
Total Silica	0.570	0.501	mg/L	1	0.500	<0.00490	114	13	85 - 115	20
Total Tin	0.333	0.293	mg/L	1	0.300	<0.00759	111	13	85 - 115	20
Total Strontium	0.0490	0.0480	mg/L	1	0.0500	<0.000281	98	2	85 - 115	20
Total Vanadium	0.248	0.248	mg/L	1	0.250	<0.00105	99	0	85 - 115	20
Total Zinc	0.264	0.264	mg/L	1	0.250	<0.00300	106	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12213

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.118	0.123	mg/L	1	0.125	<0.00274	94	4	85 - 115	20
Total Aluminum	0.884	0.980	mg/L	1	1.00	<0.0133	88	10	85 - 115	20
Total Arsenic	0.435	0.441	mg/L	1	0.500	<0.00489	87	1	85 - 115	20
Total Boron	0.0500	0.0460	mg/L	1	0.0500	<0.00544	100	8	85 - 115	20
Total Barium	0.913	0.981	mg/L	1	1.00	<0.000450	91	7	85 - 114	20
Total Beryllium	0.0242	0.0240	mg/L	1	0.0250	<0.000178	97	1	85 - 115	20
Total Cadmium	0.223	0.244	mg/L	1	0.250	<0.000268	89	9	86 - 115	20
Total Cobalt	0.235	0.261	mg/L	1	0.250	<0.00293	94	10	87 - 113	20
Total Chromium	0.0970	0.0940	mg/L	1	0.100	<0.00357	97	3	85 - 115	20
Total Copper	0.122	0.121	mg/L	1	0.125	<0.00127	98	1	85 - 113	20
Total Iron	0.439	0.444	mg/L	1	0.500	<0.00220	88	1	85 - 115	20
Total Manganese	0.231	0.252	mg/L	1	0.250	<0.000297	92	9	85 - 110	20
Total Molybdenum	0.424	0.460	mg/L	1	0.500	<0.00690	85	8	85 - 115	20
Total Nickel	0.236	0.261	mg/L	1	0.250	<0.000450	94	10	85 - 112	20
Total Phosphorous	0.436	0.466	mg/L	1	0.500	<0.0229	87	7	85 - 115	20
Total Lead	0.439	0.441	mg/L	1	0.500	<0.00698	88	0	86.1 - 112	20
Total Selenium	0.435	0.435	mg/L	1	0.500	<0.00556	87	0	75 - 125	20
Total Silica	0.486	0.526	mg/L	1	0.500	<0.00490	97	8	85 - 115	20
Total Tin	0.272	0.292	mg/L	1	0.300	<0.00759	91	7	85 - 115	20
Total Strontium	0.0440	0.0470	mg/L	1	0.0500	<0.000281	88	6	85 - 115	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Vanadium	0.227	0.242	mg/L	1	0.250	<0.00105	91	6	85 - 115	20
Total Zinc	0.223	0.263	mg/L	1	0.250	<0.00300	89	16	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 12665

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.128	0.126	mg/L	1	0.125	<0.00274	102	2	85 - 115	20
Total Aluminum	0.985	0.967	mg/L	1	1.00	<0.0133	98	2	85 - 115	20
Total Arsenic	0.503	0.526	mg/L	1	0.500	<0.00489	101	4	85 - 115	20
Total Boron	0.0510	0.0490	mg/L	1	0.0500	<0.00544	102	4	85 - 115	20
Total Barium	0.994	0.977	mg/L	1	1.00	<0.000450	99	2	85 - 114	20
Total Beryllium	0.0260	0.0256	mg/L	1	0.0250	<0.000178	104	2	85 - 115	20
Total Cadmium	0.244	0.239	mg/L	1	0.250	<0.000268	98	2	86 - 115	20
Total Cobalt	0.257	0.256	mg/L	1	0.250	<0.00293	103	0	87 - 113	20
Total Chromium	0.102	0.0980	mg/L	1	0.100	<0.00357	102	4	85 - 115	20
Total Copper	0.134	0.134	mg/L	1	0.125	<0.00127	107	0	85 - 113	20
Total Iron	0.487	0.482	mg/L	1	0.500	<0.00220	97	1	85 - 115	20
Total Manganese	0.254	0.249	mg/L	1	0.250	<0.000297	102	2	85 - 110	20
Total Molybdenum	0.480	0.492	mg/L	1	0.500	<0.00690	96	2	85 - 115	20
Total Nickel	0.258	0.259	mg/L	1	0.250	<0.000450	103	0	85 - 112	20
Total Phosphorous	0.481	0.477	mg/L	1	0.500	<0.0229	96	1	85 - 115	20
Total Lead	0.478	0.493	mg/L	1	0.500	<0.00698	96	3	86.1 - 112	20
Total Selenium	0.468	0.506	mg/L	1	0.500	<0.00556	94	8	75 - 125	20
Total Silica	0.475	0.503	mg/L	1	0.500	<0.00490	95	6	85 - 115	20
Total Tin	0.323	0.319	mg/L	1	0.300	<0.00759	108	1	85 - 115	20
Total Strontium	0.0490	0.0480	mg/L	1	0.0500	<0.000281	98	2	85 - 115	20
Total Vanadium	0.255	0.249	mg/L	1	0.250	<0.00105	102	2	85 - 115	20
Total Zinc	0.243	0.246	mg/L	1	0.250	<0.00300	97	1	85 - 115	20
Total Lithium	0.0460	0.0470	mg/L	1	0.0500	<0.000188	92	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12118

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.131	0.130	mg/L	1	0.125	<0.00274	105	1	75 - 125	20
Total Aluminum	1.03	1.05	mg/L	1	1.00	<0.0133	103	2	75 - 125	20
Total Arsenic	0.552	0.572	mg/L	1	0.500	<0.00489	110	4	75 - 125	20
Total Boron	0.0410	0.0460	mg/L	1	0.0500	<0.00544	82	11	75 - 125	20
Total Barium	1.15	1.10	mg/L	1	1.00	<0.000450	115	4	75 - 125	20
Total Beryllium	0.0260	0.0280	mg/L	1	0.0250	<0.000178	104	7	75 - 125	20
Total Cadmium	0.278	0.282	mg/L	1	0.250	<0.000268	111	1	75 - 125	20
Total Cobalt	0.280	0.286	mg/L	1	0.250	<0.00293	112	2	75 - 125	20
Total Chromium	0.108	0.109	mg/L	1	0.100	<0.00357	108	1	75 - 125	20
Total Copper	0.119	0.121	mg/L	1	0.125	<0.00127	95	2	75 - 125	20
Total Iron	0.561	0.558	mg/L	1	0.500	<0.00220	112	0	75 - 125	20

continued . . .

matrix spikes continued . . .

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Manganese	0.294	0.287	mg/L	1	0.250	<0.000297	118	2	75 - 125	20
Total Molybdenum	0.535	0.537	mg/L	1	0.500	<0.00690	107	0	75 - 125	20
Total Nickel	0.304	0.295	mg/L	1	0.250	<0.000450	122	3	75 - 125	20
Total Phosphorous	0.512	0.510	mg/L	1	0.500	<0.0229	102	0	75 - 125	20
Total Lead	0.561	0.582	mg/L	1	0.500	<0.00698	112	4	75 - 125	20
Total Selenium	0.409	0.420	mg/L	1	0.500	<0.00556	82	3	75 - 125	20
Total Silica	0.553	0.560	mg/L	1	0.500	<0.00490	111	1	75 - 125	20
Total Tin	0.297	0.311	mg/L	1	0.300	<0.00759	99	5	75 - 125	20
Total Strontium	0.0540	0.0580	mg/L	1	0.0500	<0.000281	108	7	75 - 125	20
Total Vanadium	0.272	0.274	mg/L	1	0.250	<0.00105	109	1	75 - 125	20
Total Zinc	0.292	0.288	mg/L	1	0.250	<0.00300	117	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) QC Batch: 12140

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.131	0.132	mg/L	1	0.125	<0.00274	105	1	75 - 125	20
Total Aluminum	1.13	1.12	mg/L	1	1.00	<0.0133	113	1	75 - 125	20
Total Arsenic	0.506	0.503	mg/L	1	0.500	<0.00489	101	0	75 - 125	20
Total Boron	0.0480	0.0520	mg/L	1	0.0500	<0.00544	96	8	75 - 125	20
Total Barium	1.14	1.13	mg/L	1	1.00	<0.000450	114	1	75 - 125	20
Total Beryllium	0.0240	0.0250	mg/L	1	0.0250	<0.000178	96	4	75 - 125	20
Total Cadmium	0.258	0.260	mg/L	1	0.250	<0.000268	103	1	75 - 125	20
Total Cobalt	0.277	0.278	mg/L	1	0.250	<0.00293	111	0	75 - 125	20
Total Chromium	0.102	0.103	mg/L	1	0.100	<0.00357	102	1	75 - 125	20
Total Copper	0.138	0.135	mg/L	1	0.125	<0.00127	110	2	75 - 125	20
Total Iron	0.522	0.520	mg/L	1	0.500	<0.00220	104	0	75 - 125	20
Total Manganese	0.272	0.265	mg/L	1	0.250	<0.000297	109	3	75 - 125	20
Total Molybdenum	0.510	0.509	mg/L	1	0.500	<0.00690	102	0	75 - 125	20
Total Nickel	0.257	0.279	mg/L	1	0.250	<0.000450	103	8	75 - 125	20
Total Phosphorous	0.498	0.501	mg/L	1	0.500	<0.0229	100	1	75 - 125	20
Total Lead	0.605	0.614	mg/L	1	0.500	0.062	109	1	75 - 125	20
Total Selenium	0.517	0.460	mg/L	1	0.500	<0.00556	103	12	75 - 125	20
Total Silica	0.551	0.512	mg/L	1	0.500	<0.00490	110	7	75 - 125	20
Total Tin	0.303	0.326	mg/L	1	0.300	<0.00759	101	7	75 - 125	20
Total Strontium	0.0540	0.0520	mg/L	1	0.0500	<0.000281	108	4	75 - 125	20
Total Vanadium	0.261	0.261	mg/L	1	0.250	<0.00105	104	0	75 - 125	20
Total Zinc	0.253	0.257	mg/L	1	0.250	<0.00300	101	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12213

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.128	0.132	mg/L	1	0.125	<0.00274	102	3	75 - 125	20
Total Aluminum	1.07	1.17	mg/L	1	1.00	<0.0133	107	9	75 - 125	20
Total Arsenic	0.402	0.457	mg/L	1	0.500	<0.00489	80	13	75 - 125	20

continued . . .

matrix spikes continued . . .

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Boron	0.0440	0.0510	mg/L	1	0.0500	<0.00544	88	15	75 - 125	20
Total Barium	1.09	1.13	mg/L	1	1.00	<0.000450	109	4	75 - 125	20
Total Beryllium	0.0230	0.0240	mg/L	1	0.0250	<0.000178	92	4	75 - 125	20
Total Cadmium	0.218	0.227	mg/L	1	0.250	<0.000268	87	4	75 - 125	20
Total Cobalt	0.239	0.248	mg/L	1	0.250	<0.00293	96	4	75 - 125	20
Total Chromium	0.0870	0.0910	mg/L	1	0.100	<0.00357	87	4	75 - 125	20
Total Copper	0.142	0.147	mg/L	1	0.125	<0.00127	114	3	75 - 125	20
Total Iron	0.538	0.554	mg/L	1	0.500	<0.00220	108	3	75 - 125	20
Total Manganese	0.232	0.239	mg/L	1	0.250	<0.000297	93	3	75 - 125	20
Total Molybdenum	0.424	0.428	mg/L	1	0.500	<0.00690	85	1	75 - 125	20
Total Nickel	0.243	0.257	mg/L	1	0.250	<0.000450	97	6	75 - 125	20
Total Phosphorous	0.412	0.440	mg/L	1	0.500	<0.0229	82	6	75 - 125	20
Total Lead	0.455	0.494	mg/L	1	0.500	<0.00698	91	8	75 - 125	20
Total Selenium	0.419	0.460	mg/L	1	0.500	<0.00556	84	9	75 - 125	20
Total Silica	0.482	0.456	mg/L	1	0.500	<0.00490	96	6	75 - 125	20
Total Tin	0.266	0.263	mg/L	1	0.300	<0.00759	89	1	75 - 125	20
Total Strontium	0.0480	0.0490	mg/L	1	0.0500	<0.000281	96	2	75 - 125	20
Total Vanadium	0.249	0.259	mg/L	1	0.250	<0.00105	100	4	75 - 125	20
Total Zinc	0.232	0.242	mg/L	1	0.250	<0.00300	93	4	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 12665

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	[2][3]	0.199	0.203	mg/L	1	0.125	<0.00274	159	2	75 - 125	20
Total Aluminum	[4][5]	1.80	1.75	mg/L	1	1.00	0.03	177	3	75 - 125	20
Total Arsenic		0.497	0.503	mg/L	1	0.500	<0.00489	99	1	75 - 125	20
Total Boron	[6][7]	3.62	3.65	mg/L	1	0.0500	3.53	180	1	75 - 125	20
Total Barium	[8][9]	1.34	1.36	mg/L	1	1.00	0.025	132	1	75 - 125	20
Total Beryllium		0.0240	0.0250	mg/L	1	0.0250	<0.000178	96	4	75 - 125	20
Total Cadmium		0.239	0.242	mg/L	1	0.250	0.003	94	1	75 - 125	20
Total Cobalt		0.299	0.302	mg/L	1	0.250	0.011	115	1	75 - 125	20
Total Chromium		0.103	0.105	mg/L	1	0.100	0.005	98	2	75 - 125	20
Total Copper	[10][11]	0.244	0.246	mg/L	1	0.125	0.025	175	1	75 - 125	20
Total Iron		1.39	1.45	mg/L	1	0.500	0.975	83	4	75 - 125	20
Total Manganese		0.332	0.330	mg/L	1	0.250	0.067	106	1	75 - 125	20
Total Molybdenum		0.954	0.950	mg/L	1	0.500	0.457	99	0	75 - 125	20
Total Nickel		1.57	1.52	mg/L	1	0.250	1.28	116	3	75 - 125	20
Total Phosphorous	[12][13]	0.438	0.443	mg/L	1	0.500	0.101	67	1	75 - 125	20

continued . . .

[2]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[3]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[4]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[5]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[6]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[7]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[8]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[9]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[10]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[11]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[12]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[13]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Lead		0.627	0.620	mg/L	1	0.500	<0.00698	125	1	75 - 125	20
Total Selenium		0.747	0.750	mg/L	1	0.500	0.265	96	0	75 - 125	20
Total Silica	[14][15]	19.7	19.8	mg/L	1	0.500	18.9	160	0	75 - 125	20
Total Tin		0.317	0.315	mg/L	1	0.300	<0.00759	106	1	75 - 125	20
Total Strontium	[16][17]	11.6	11.6	mg/L	1	0.0500	11.2	800	0	75 - 125	20
Total Vanadium		0.248	0.250	mg/L	1	0.250	<0.00105	99	1	75 - 125	20
Total Zinc		0.291	0.288	mg/L	1	0.250	0.018	109	1	75 - 125	20
Total Lithium	[18][19]	2.02	2.05	mg/L	1	0.0500	1.78	480	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 12118

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.125	100	90 - 110	2004-08-20
Total Aluminum		mg/L	1.00	1.00	100	90 - 110	2004-08-20
Total Arsenic		mg/L	1.00	0.957	96	90 - 110	2004-08-20
Total Boron		mg/L	1.00	0.999	100	90 - 110	2004-08-20
Total Barium		mg/L	1.00	1.02	102	90 - 110	2004-08-20
Total Beryllium		mg/L	1.00	0.996	100	90 - 110	2004-08-20
Total Cadmium		mg/L	1.00	0.999	100	90 - 110	2004-08-20
Total Cobalt		mg/L	1.00	1.00	100	90 - 110	2004-08-20
Total Chromium		mg/L	1.00	1.03	103	90 - 110	2004-08-20
Total Copper		mg/L	1.00	1.00	100	90 - 110	2004-08-20
Total Iron		mg/L	1.00	1.01	101	90 - 110	2004-08-20
Total Manganese		mg/L	1.00	1.01	101	90 - 110	2004-08-20
Total Molybdenum		mg/L	1.00	1.02	102	90 - 110	2004-08-20
Total Nickel		mg/L	1.00	0.996	100	90 - 110	2004-08-20
Total Phosphorous		mg/L	5.00	4.78	96	90 - 110	2004-08-20
Total Lead		mg/L	1.00	0.993	99	90 - 110	2004-08-20
Total Selenium		mg/L	1.00	0.971	97	90 - 110	2004-08-20
Total Silica		mg/L	5.00	4.99	100	90 - 110	2004-08-20
Total Tin		mg/L	1.00	1.01	101	90 - 110	2004-08-20
Total Strontium		mg/L	1.00	1.01	101	90 - 110	2004-08-20
Total Vanadium		mg/L	1.00	1.04	104	90 - 110	2004-08-20
Total Zinc		mg/L	1.00	0.973	97	90 - 110	2004-08-20

Standard (CCV-1) QC Batch: 12118

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.126	101	90 - 110	2004-08-20
Total Aluminum		mg/L	1.00	0.995	100	90 - 110	2004-08-20

continued . . .

[14]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[15]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[16]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[17]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[18]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[19]MS recovery invalid due to matrix difficulties. LCS demonstrates process under control.

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	1.00	0.989	99	90 - 110	2004-08-20
Total Boron		mg/L	1.00	1.03	103	90 - 110	2004-08-20
Total Barium		mg/L	1.00	1.02	102	90 - 110	2004-08-20
Total Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-08-20
Total Cadmium		mg/L	1.00	1.03	103	90 - 110	2004-08-20
Total Cobalt		mg/L	1.00	1.02	102	90 - 110	2004-08-20
Total Chromium		mg/L	1.00	1.05	105	90 - 110	2004-08-20
Total Copper		mg/L	1.00	1.01	101	90 - 110	2004-08-20
Total Iron		mg/L	1.00	1.03	103	90 - 110	2004-08-20
Total Manganese		mg/L	1.00	1.02	102	90 - 110	2004-08-20
Total Molybdenum		mg/L	1.00	1.02	102	90 - 110	2004-08-20
Total Nickel		mg/L	1.00	1.02	102	90 - 110	2004-08-20
Total Phosphorous		mg/L	5.00	4.97	99	90 - 110	2004-08-20
Total Lead		mg/L	1.00	0.993	99	90 - 110	2004-08-20
Total Selenium		mg/L	1.00	0.978	98	90 - 110	2004-08-20
Total Silica		mg/L	5.00	5.23	105	90 - 110	2004-08-20
Total Tin		mg/L	1.00	1.01	101	90 - 110	2004-08-20
Total Strontium		mg/L	1.00	1.01	101	90 - 110	2004-08-20
Total Vanadium		mg/L	1.00	0.994	99	90 - 110	2004-08-20
Total Zinc		mg/L	1.00	0.995	100	90 - 110	2004-08-20

Standard (CCV-1) QC Batch: 12140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.123	98	90 - 110	2004-08-23
Total Aluminum		mg/L	1.00	0.964	96	90 - 110	2004-08-23
Total Arsenic		mg/L	1.00	0.995	100	90 - 110	2004-08-23
Total Boron		mg/L	1.00	0.992	99	90 - 110	2004-08-23
Total Barium		mg/L	1.00	0.973	97	90 - 110	2004-08-23
Total Beryllium		mg/L	1.00	0.997	100	90 - 110	2004-08-23
Total Cadmium		mg/L	1.00	1.02	102	90 - 110	2004-08-23
Total Cobalt		mg/L	1.00	0.998	100	90 - 110	2004-08-23
Total Chromium		mg/L	1.00	1.00	100	90 - 110	2004-08-23
Total Copper		mg/L	1.00	0.987	99	90 - 110	2004-08-23
Total Iron		mg/L	1.00	1.00	100	90 - 110	2004-08-23
Total Manganese		mg/L	1.00	0.987	99	90 - 110	2004-08-23
Total Molybdenum		mg/L	1.00	0.988	99	90 - 110	2004-08-23
Total Nickel		mg/L	1.00	0.988	99	90 - 110	2004-08-23
Total Phosphorous		mg/L	5.00	4.86	97	90 - 110	2004-08-23
Total Lead		mg/L	1.00	0.932	93	90 - 110	2004-08-23
Total Selenium		mg/L	1.00	0.971	97	90 - 110	2004-08-23
Total Silica		mg/L	5.00	5.03	101	90 - 110	2004-08-23
Total Tin		mg/L	1.00	0.947	95	90 - 110	2004-08-23
Total Strontium		mg/L	1.00	0.963	96	90 - 110	2004-08-23
Total Vanadium		mg/L	1.00	1.00	100	90 - 110	2004-08-23
Total Zinc		mg/L	1.00	0.962	96	90 - 110	2004-08-23

Standard (CCV-2) QC Batch: 12140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.123	98	90 - 110	2004-08-23
Total Aluminum		mg/L	1.00	0.964	96	90 - 110	2004-08-23
Total Arsenic		mg/L	1.00	0.995	100	90 - 110	2004-08-23
Total Boron		mg/L	1.00	0.992	99	90 - 110	2004-08-23
Total Barium		mg/L	1.00	0.973	97	90 - 110	2004-08-23
Total Beryllium		mg/L	1.00	0.997	100	90 - 110	2004-08-23
Total Cadmium		mg/L	1.00	1.02	102	90 - 110	2004-08-23
Total Cobalt		mg/L	1.00	0.998	100	90 - 110	2004-08-23
Total Chromium		mg/L	1.00	1.00	100	90 - 110	2004-08-23
Total Copper		mg/L	1.00	0.987	99	90 - 110	2004-08-23
Total Iron		mg/L	1.00	1.00	100	90 - 110	2004-08-23
Total Manganese		mg/L	1.00	0.987	99	90 - 110	2004-08-23
Total Molybdenum		mg/L	1.00	0.988	99	90 - 110	2004-08-23
Total Nickel		mg/L	1.00	0.988	99	90 - 110	2004-08-23
Total Phosphorous		mg/L	5.00	4.86	97	90 - 110	2004-08-23
Total Lead		mg/L	1.00	0.989	99	90 - 110	2004-08-23
Total Selenium		mg/L	1.00	0.971	97	90 - 110	2004-08-23
Total Silica		mg/L	5.00	5.14	103	90 - 110	2004-08-23
Total Tin		mg/L	1.00	0.947	95	90 - 110	2004-08-23
Total Strontium		mg/L	1.00	0.963	96	90 - 110	2004-08-23
Total Vanadium		mg/L	1.00	0.953	95	90 - 110	2004-08-23
Total Zinc		mg/L	1.00	0.962	96	90 - 110	2004-08-23

Standard (ICV-1) QC Batch: 12213

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.125	100	90 - 110	2004-08-24
Total Aluminum		mg/L	1.00	0.988	99	90 - 110	2004-08-24
Total Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-08-24
Total Boron		mg/L	1.00	1.00	100	90 - 110	2004-08-24
Total Barium		mg/L	1.00	1.01	101	90 - 110	2004-08-24
Total Beryllium		mg/L	1.00	1.00	100	90 - 110	2004-08-24
Total Cadmium		mg/L	1.00	1.02	102	90 - 110	2004-08-24
Total Cobalt		mg/L	1.00	1.00	100	90 - 110	2004-08-24
Total Chromium		mg/L	1.00	1.01	101	90 - 110	2004-08-24
Total Copper		mg/L	1.00	1.01	101	90 - 110	2004-08-24
Total Iron		mg/L	1.00	1.02	102	90 - 110	2004-08-24
Total Manganese		mg/L	1.00	1.00	100	90 - 110	2004-08-24
Total Molybdenum		mg/L	1.00	0.998	100	90 - 110	2004-08-24
Total Nickel		mg/L	1.00	1.00	100	90 - 110	2004-08-24
Total Phosphorous		mg/L	5.00	4.88	98	90 - 110	2004-08-24
Total Lead		mg/L	1.00	0.999	100	90 - 110	2004-08-24
Total Selenium		mg/L	1.00	0.985	98	90 - 110	2004-08-24
Total Silica		mg/L	5.00	5.02	100	90 - 110	2004-08-24
Total Tin		mg/L	1.00	0.974	97	90 - 110	2004-08-24
Total Strontium		mg/L	1.00	0.993	99	90 - 110	2004-08-24
Total Vanadium		mg/L	1.00	0.967	97	90 - 110	2004-08-24
Total Zinc		mg/L	1.00	0.976	98	90 - 110	2004-08-24

Standard (CCV-1) QC Batch: 12213

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.118	94	90 - 110	2004-08-24
Total Aluminum		mg/L	1.00	0.916	92	90 - 110	2004-08-24
Total Arsenic		mg/L	1.00	0.931	93	90 - 110	2004-08-24
Total Boron		mg/L	1.00	0.938	94	90 - 110	2004-08-24
Total Barium		mg/L	1.00	0.926	93	90 - 110	2004-08-24
Total Beryllium		mg/L	1.00	0.938	94	90 - 110	2004-08-24
Total Cadmium		mg/L	1.00	0.924	92	90 - 110	2004-08-24
Total Cobalt		mg/L	1.00	0.913	91	90 - 110	2004-08-24
Total Chromium		mg/L	1.00	0.931	93	90 - 110	2004-08-24
Total Copper		mg/L	1.00	0.927	93	90 - 110	2004-08-24
Total Iron		mg/L	1.00	0.922	92	90 - 110	2004-08-24
Total Manganese		mg/L	1.00	0.912	91	90 - 110	2004-08-24
Total Molybdenum		mg/L	1.00	0.901	90	90 - 110	2004-08-24
Total Nickel		mg/L	1.00	0.912	91	90 - 110	2004-08-24
Total Phosphorous		mg/L	5.00	4.51	90	90 - 110	2004-08-24
Total Lead		mg/L	1.00	0.958	96	90 - 110	2004-08-24
Total Selenium		mg/L	1.00	0.929	93	90 - 110	2004-08-24
Total Silica		mg/L	5.00	4.83	97	90 - 110	2004-08-24
Total Tin		mg/L	1.00	0.905	90	90 - 110	2004-08-24
Total Strontium		mg/L	1.00	0.912	91	90 - 110	2004-08-24
Total Vanadium		mg/L	1.00	0.942	94	90 - 110	2004-08-24
Total Zinc		mg/L	1.00	0.901	90	90 - 110	2004-08-24

Standard (ICV-1) QC Batch: 12665

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.128	102	90 - 110	2004-09-15
Total Aluminum		mg/L	1.00	0.997	100	90 - 110	2004-09-15
Total Arsenic		mg/L	1.00	1.04	104	90 - 110	2004-09-15
Total Boron		mg/L	1.00	1.00	100	90 - 110	2004-09-15
Total Barium		mg/L	1.00	1.00	100	90 - 110	2004-09-15
Total Beryllium		mg/L	1.00	1.00	100	90 - 110	2004-09-15
Total Cadmium		mg/L	1.00	1.00	100	90 - 110	2004-09-15
Total Cobalt		mg/L	1.00	1.00	100	90 - 110	2004-09-15
Total Chromium		mg/L	1.00	1.03	103	90 - 110	2004-09-15
Total Copper		mg/L	1.00	1.01	101	90 - 110	2004-09-15
Total Iron		mg/L	1.00	1.01	101	90 - 110	2004-09-15
Total Manganese		mg/L	1.00	1.00	100	90 - 110	2004-09-15
Total Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-09-15
Total Nickel		mg/L	1.00	0.992	99	90 - 110	2004-09-15
Total Phosphorous		mg/L	5.00	4.88	98	90 - 110	2004-09-15
Total Lead		mg/L	1.00	1.02	102	90 - 110	2004-09-15
Total Selenium		mg/L	1.00	1.03	103	90 - 110	2004-09-15
Total Silica		mg/L	5.00	5.20	104	90 - 110	2004-09-15
Total Tin		mg/L	1.00	0.988	99	90 - 110	2004-09-15
Total Strontium		mg/L	1.00	0.998	100	90 - 110	2004-09-15
Total Vanadium		mg/L	1.00	1.04	104	90 - 110	2004-09-15

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		mg/L	1.00	0.984	98	90 - 110	2004-09-15
Total Lithium		mg/L	1.00	1.00	100	90 - 110	2004-09-15

Standard (CCV-1) QC Batch: 12665

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.125	100	90 - 110	2004-09-15
Total Aluminum		mg/L	1.00	0.992	99	90 - 110	2004-09-15
Total Arsenic		mg/L	1.00	0.977	98	90 - 110	2004-09-15
Total Boron		mg/L	1.00	0.997	100	90 - 110	2004-09-15
Total Barium		mg/L	1.00	0.999	100	90 - 110	2004-09-15
Total Beryllium		mg/L	1.00	1.00	100	90 - 110	2004-09-15
Total Cadmium		mg/L	1.00	0.986	99	90 - 110	2004-09-15
Total Cobalt		mg/L	1.00	0.984	98	90 - 110	2004-09-15
Total Chromium		mg/L	1.00	1.02	102	90 - 110	2004-09-15
Total Copper		mg/L	1.00	1.00	100	90 - 110	2004-09-15
Total Iron		mg/L	1.00	0.989	99	90 - 110	2004-09-15
Total Manganese		mg/L	1.00	0.981	98	90 - 110	2004-09-15
Total Molybdenum		mg/L	1.00	1.00	100	90 - 110	2004-09-15
Total Nickel		mg/L	1.00	0.976	98	90 - 110	2004-09-15
Total Phosphorous		mg/L	5.00	4.85	97	90 - 110	2004-09-15
Total Lead		mg/L	1.00	0.976	98	90 - 110	2004-09-15
Total Selenium		mg/L	1.00	0.989	99	90 - 110	2004-09-15
Total Silica		mg/L	5.00	5.06	101	90 - 110	2004-09-15
Total Tin		mg/L	1.00	0.942	94	90 - 110	2004-09-15
Total Strontium		mg/L	1.00	0.995	100	90 - 110	2004-09-15
Total Vanadium		mg/L	1.00	0.979	98	90 - 110	2004-09-15
Total Zinc		mg/L	1.00	0.982	98	90 - 110	2004-09-15
Total Lithium		mg/L	1.00	1.02	102	90 - 110	2004-09-15

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 16, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11972	Date Analyzed:	2004-08-14	Analyzed By:	BP
Prep Batch:	10577	Date Prepared:	2004-08-13	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.5	mg/L	0.1	150	83	81.8 - 161

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11972	Date Analyzed:	2004-08-14	Analyzed By:	BP
Prep Batch:	10577	Date Prepared:	2004-08-13	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[1]	11.9	mg/L	0.1	150	79	81.8 - 161

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11972	Date Analyzed:	2004-08-14	Analyzed By:	BP
Prep Batch:	10577	Date Prepared:	2004-08-13	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.0	mg/L	0.1	150	87	81.8 - 161

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11972	Date Analyzed:	2004-08-14	Analyzed By:	BP
Prep Batch:	10577	Date Prepared:	2004-08-13	Prepared By:	DS

[1] Surrogate recovery out of control chart range but within method limits.

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		16.2	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[2]	11.7	mg/L	0.1	150	78	81.8 - 161

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11972	Date Analyzed:	2004-08-14	Analyzed By:	BP
Prep Batch:	10577	Date Prepared:	2004-08-13	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.0	mg/L	0.1	150	87	81.8 - 161

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	12163	Date Analyzed:	2004-08-21	Analyzed By:	BP
Prep Batch:	10739	Date Prepared:	2004-08-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.0	mg/L	0.1	150	93	81.8 - 161

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	12163	Date Analyzed:	2004-08-21	Analyzed By:	BP
Prep Batch:	10739	Date Prepared:	2004-08-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.7	mg/L	0.1	150	105	81.8 - 161

[2]Surrogate recovery out of control chart range but within method limits.

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	12163	Date Analyzed:	2004-08-21	Analyzed By:	BP
Prep Batch:	10739	Date Prepared:	2004-08-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.9	mg/L	0.1	150	100	81.8 - 161

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	12163	Date Analyzed:	2004-08-21	Analyzed By:	BP
Prep Batch:	10739	Date Prepared:	2004-08-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.3	mg/L	0.1	150	109	81.8 - 161

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	12163	Date Analyzed:	2004-08-21	Analyzed By:	BP
Prep Batch:	10739	Date Prepared:	2004-08-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.2	mg/L	0.1	150	101	81.8 - 161

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	12163	Date Analyzed:	2004-08-21	Analyzed By:	BP
Prep Batch:	10739	Date Prepared:	2004-08-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		19.1	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.2	mg/L	0.1	150	108	81.8 - 161

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	12163	Date Analyzed:	2004-08-21	Analyzed By:	BP
Prep Batch:	10739	Date Prepared:	2004-08-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.0	mg/L	0.1	150	107	81.8 - 161

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	12163	Date Analyzed:	2004-08-21	Analyzed By:	BP
Prep Batch:	10739	Date Prepared:	2004-08-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		18.0	mg/L	0.1	150	120	81.8 - 161

Method Blank (1) QC Batch: 11972

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[3]	12.1	mg/L	0.1	150	81	81.8 - 161

Method Blank (1) QC Batch: 12163

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

[3]Surrogate recovery out of control chart range but within method limits.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.6	mg/L	0.1	150	84	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 11972

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	22.6	22.4	mg/L	0.1	250	<0.538	90	1	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	[4][5]	11.9	12.2	mg/L	0.1	150	79	81	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 12163

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	23.3	23.4	mg/L	0.1	250	0.59	91	0	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	12.9	12.8	mg/L	0.1	150	86	85	81.8 - 161

Standard (ICV-1) QC Batch: 11972

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	216	86	68 - 140	2004-08-14

Standard (CCV-1) QC Batch: 11972

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	226	90	68 - 140	2004-08-14

Standard (ICV-1) QC Batch: 12163

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	264	106	68 - 140	2004-08-21

[4]Surrogate recovery out of control chart range but within method limits.
[5]Surrogate recovery out of control chart range but within method limits.

Standard (CCV-1) QC Batch: 12163

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	244	98	68 - 140	2004-08-21

Standard (CCV-2) QC Batch: 12163

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	255	102	68 - 140	2004-08-21

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 16, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18

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: 41182 - HLSF-0154-DRW-012-0804

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11890	Date Analyzed:	2004-08-12	Analyzed By:	MT
Prep Batch:	10509	Date Prepared:	2004-08-12	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0950	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0886	mg/L	1	0.100	89	70 - 130

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11890	Date Analyzed:	2004-08-12	Analyzed By:	MT
Prep Batch:	10509	Date Prepared:	2004-08-12	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0930	mg/L	1	0.100	93	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0945	mg/L	1	0.100	94	70 - 130

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11890	Date Analyzed:	2004-08-12	Analyzed By:	MT
Prep Batch:	10509	Date Prepared:	2004-08-12	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0998	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0870	mg/L	1	0.100	87	70 - 130

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	12196	Date Analyzed:	2004-08-23	Analyzed By:	MT

Prep Batch: 10773 Date Prepared: 2004-08-23 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	[1]	<0.200	mg/L	2	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.194	mg/L	2	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)		0.164	mg/L	2	0.100	82	70 - 130

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
QC Batch: 12196 Date Analyzed: 2004-08-23 Analyzed By: MT
Prep Batch: 10773 Date Prepared: 2004-08-23 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	[2]	<0.200	mg/L	2	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.173	mg/L	2	0.100	86	70 - 130
4-Bromofluorobenzene (4-BFB)	[3]	0.112	mg/L	2	0.100	56	70 - 130

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
QC Batch: 12196 Date Analyzed: 2004-08-23 Analyzed By: MT
Prep Batch: 10773 Date Prepared: 2004-08-23 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	[4]	<0.200	mg/L	2	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.184	mg/L	2	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)		0.172	mg/L	2	0.100	86	70 - 130

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
QC Batch: 12196 Date Analyzed: 2004-08-23 Analyzed By: MT
Prep Batch: 10773 Date Prepared: 2004-08-23 Prepared By: MT

[1]Sample was reanalyzed due to a machine error.
[2]Sample was reanalyzed due to a machine error.
[3]Low TFT surrogate recovery due to matrix interference. BFB surrogate recovery shows the method to be in control.
[4]Sample was reanalyzed due to a machine error.

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	[5]	<0.200	mg/L	2	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.186	mg/L	2	0.100	93	70 - 130
4-Bromofluorobenzene (4-BFB)		0.178	mg/L	2	0.100	89	70 - 130

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	12196	Date Analyzed:	2004-08-23	Analyzed By:	MT
Prep Batch:	10773	Date Prepared:	2004-08-23	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	[6]	<0.200	mg/L	2	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.183	mg/L	2	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)		0.171	mg/L	2	0.100	86	70 - 130

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	12196	Date Analyzed:	2004-08-23	Analyzed By:	MT
Prep Batch:	10773	Date Prepared:	2004-08-23	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	[7]	<0.200	mg/L	2	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.186	mg/L	2	0.100	93	70 - 130
4-Bromofluorobenzene (4-BFB)		0.174	mg/L	2	0.100	87	70 - 130

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	12196	Date Analyzed:	2004-08-23	Analyzed By:	MT
Prep Batch:	10773	Date Prepared:	2004-08-23	Prepared By:	MT

continued . . .

[5]Sample was reanalyzed due to a machine error.
[6]Sample was reanalyzed due to a machine error.
[7]Sample was reanalyzed due to a machine error.

sample 41704 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	[8]	0.211	mg/L	2	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.192	mg/L	2	0.100	96	70 - 130
4-Bromofluorobenzene (4-BFB)		0.199	mg/L	2	0.100	100	70 - 130

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	12304	Date Analyzed:	2004-08-26	Analyzed By:	MS
Prep Batch:	10876	Date Prepared:	2004-08-26	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.585	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[9]	0.0402	mg/L	1	0.100	40	70 - 130
4-Bromofluorobenzene (4-BFB)	[10]	0.0684	mg/L	1	0.100	68	70 - 130

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	12304	Date Analyzed:	2004-08-26	Analyzed By:	MS
Prep Batch:	10876	Date Prepared:	2004-08-26	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.249	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[11]	0.0395	mg/L	1	0.100	40	70 - 130
4-Bromofluorobenzene (4-BFB)	[12]	0.0510	mg/L	1	0.100	51	70 - 130

Sample: 41890 - HLSF-0154-HCF-005-0804

[8] Sample was reanalyzed due to a machine error.
[9] Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.
[10] Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.
[11] Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.
[12] Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	12304	Date Analyzed:	2004-08-26	Analyzed By:	MS
Prep Batch:	10876	Date Prepared:	2004-08-26	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.226	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[13]	0.0459	mg/L	1	0.100	46	70 - 130
4-Bromofluorobenzene (4-BFB)	[14]	0.0571	mg/L	1	0.100	57	70 - 130

Method Blank (1) QC Batch: 11890

Parameter	Flag	Result	Units	RL
GRO		0.187	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0947	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0874	mg/L	1	0.100	87	70 - 130

Method Blank (1) QC Batch: 12196

Parameter	Flag	Result	Units	RL
GRO		0.171	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0949	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)	[15]	0.0664	mg/L	1	0.100	66	70 - 130

Method Blank (1) QC Batch: 12304

Parameter	Flag	Result	Units	RL
GRO		0.283	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0949	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0738	mg/L	1	0.100	74	70 - 130

[13]Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.
[14]Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.
[15]Low surrogate recovery due to prep. ICV/CCV show the method to be in control.

Laboratory Control Spike (LCS-1) QC Batch: 11890

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	1.08	1.05	mg/L	1	1.00	<0.0261	108	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0979	0.0938	mg/L	1	0.100	98	94	70 - 130
4-Bromofluorobenzene (4-BFB)	0.105	0.102	mg/L	1	0.100	105	102	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 12196

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	1.04	1.00	mg/L	1	1.00	<0.0261	104	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0977	0.0981	mg/L	1	0.100	98	98	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0948	0.0941	mg/L	1	0.100	95	94	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 12304

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	1.12	1.19	mg/L	1	1.00	<0.0261	112	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0976	0.103	mg/L	1	0.100	98	103	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0987	0.110	mg/L	1	0.100	99	110	70 - 130

Standard (ICV-1) QC Batch: 11890

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.866	87	85 - 115	2004-08-12

Standard (CCV-1) QC Batch: 11890

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.09	109	85 - 115	2004-08-12

Standard (ICV-1) QC Batch: 12196

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.871	87	85 - 115	2004-08-23

Standard (CCV-1) QC Batch: 12196

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.02	102	85 - 115	2004-08-23

Standard (CCV-2) QC Batch: 12196

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.954	95	85 - 115	2004-08-23

Standard (ICV-1) QC Batch: 12304

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.09	109	85 - 115	2004-08-26

Standard (CCV-1) QC Batch: 12304

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.11	111	85 - 115	2004-08-26

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: September 15, 2004

Work Order: 4081025

Project Name: HLSTF Diesel Spill
Project Number: 20 GG

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
41182	HLSF-0154-DRW-012-0804	water	2004-08-09	11:30	2004-08-09
41183	HLSF-0154-TB-356	water	2004-08-09	11:30	2004-08-09
41254	HLSF-0154-DRW-005-0804	water	2004-08-10	11:05	2004-08-10
41255	HLSF-0154-TB-355	water	2004-08-10	11:05	2004-08-10
41256	HLSF-0154-DRW-016-0804	water	2004-08-10	13:53	2004-08-10
41257	HLSF-0154-TB-358	water	2004-08-10	13:53	2004-08-10
41282	HLSF-0154-DRW-013-0804	water	2004-08-11	14:17	2004-08-11
41283	HLSF-0154-TB-357	water	2004-08-11	14:17	2004-08-11
41284	HLSF-0154-FB-357	water	2004-08-11	14:17	2004-08-11
41285	HLSF-0154-HCF-001-0804	water	2004-08-11	11:19	2004-08-11
41286	HLSF-0154-TB-359	water	2004-08-11	11:19	2004-08-11
41287	HLSF-0154-FB-359	water	2004-08-11	11:19	2004-08-11
41385	HLSF-0154-DRW-003-0804	water	2004-08-12	14:09	2004-08-12
41386	HLSF-0154-TB-352	water	2004-08-12	14:09	2004-08-12
41387	HLSF-0154-FB-352	water	2004-08-12	14:09	2004-08-12
41388	HLSF-0154-DRW-103-0804	water	2004-08-12	14:09	2004-08-12
41389	HLSF-0154-TB-353	water	2004-08-12	14:09	2004-08-12
41390	HLSF-0154-DRW-004-0804	water	2004-08-12	12:47	2004-08-12
41391	HLSF-0154-TB-354	water	2004-08-12	12:47	2004-08-12
41392	HLSF-0154-FB-354	water	2004-08-12	12:47	2004-08-12
41702	HLSF-0154-DRW-001-0804	water	2004-08-17	12:41	2004-08-17
41703	HLSF-0154-TB-350	water	2004-08-17	12:41	2004-08-17
41704	HLSF-0154-HCF-007-0804	water	2004-08-17	12:13	2004-08-17
41705	HLSF-0154-TB-362	water	2004-08-17	12:13	2004-08-17
41886	HLSF-0154-DRW-002-0804	water	2004-08-18	13:18	2004-08-18
41887	HLSF-0154-TB-351	water	2004-08-18	13:18	2004-08-18
41888	HLSF-0154-HCF-105-0804	water	2004-08-18	12:40	2004-08-18
41889	HLSF-0154-TB-361	water	2004-08-18	12:40	2004-08-18
41890	HLSF-0154-HCF-005-0804	water	2004-08-18	12:40	2004-08-18
41891	HLSF-0154-TB-360	water	2004-08-18	12:40	2004-08-18

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 68 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis,

Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 41182 - HLSF-0154-DRW-012-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11984	Date Analyzed:	2004-08-13	Analyzed By:	JG
Prep Batch:	10588	Date Prepared:	2004-08-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		<1.00	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		19.7	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00

continued . . .

sample 41182 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.4	μg/L	1	50.0	103	70 - 130
Toluene-d8		48.1	μg/L	1	50.0	96	70 - 130
4-Bromofluorobenzene (4-BFB)		48.7	μg/L	1	50.0	97	70 - 130

Sample: 41183 - HLSF-0154-TB-356

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11984	Date Analyzed:	2004-08-13	Analyzed By:	JG
Prep Batch:	10588	Date Prepared:	2004-08-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00

continued . . .

sample 41183 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		1.79	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		<1.00	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00

continued . . .

sample 41183 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.7	μg/L	1	50.0	103	70 - 130
Toluene-d8		48.0	μg/L	1	50.0	96	70 - 130
4-Bromofluorobenzene (4-BFB)		48.5	μg/L	1	50.0	97	70 - 130

Sample: 41254 - HLSF-0154-DRW-005-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11984	Date Analyzed:	2004-08-13	Analyzed By:	JG
Prep Batch:	10588	Date Prepared:	2004-08-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		<1.00	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		8.65	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		2.19	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00

continued . . .

sample 41254 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		1.46	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		<1.00	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.9	μg/L	1	50.0	104	70 - 130
Toluene-d8		48.0	μg/L	1	50.0	96	70 - 130
4-Bromofluorobenzene (4-BFB)		47.8	μg/L	1	50.0	96	70 - 130

Sample: 41255 - HLSF-0154-TB-355

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11984	Date Analyzed:	2004-08-13	Analyzed By:	JG
Prep Batch:	10588	Date Prepared:	2004-08-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		33.4	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		1.47	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00

continued . . .

sample 41255 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.1	µg/L	1	50.0	104	70 - 130
Toluene-d8		47.8	µg/L	1	50.0	96	70 - 130
4-Bromofluorobenzene (4-BFB)		47.7	µg/L	1	50.0	95	70 - 130

Sample: 41256 - HLSF-0154-DRW-016-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11984	Date Analyzed:	2004-08-13	Analyzed By:	JG
Prep Batch:	10588	Date Prepared:	2004-08-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00

continued . . .

sample 41256 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		6.85	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		104	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
Isopropylbenzene		<1.00	µg/L	1	1.00
Bromobenzene		<1.00	µg/L	1	1.00
n-Propylbenzene		<1.00	µg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1.00
tert-Butylbenzene		<1.00	µg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1.00
sec-Butylbenzene		<1.00	µg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1	1.00
p-Isopropyltoluene		<1.00	µg/L	1	1.00
4-Chlorotoluene		<1.00	µg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1.00

continued . . .

sample 41256 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
n-Butylbenzene		<1.00	µg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5.00
Naphthalene		<5.00	µg/L	1	5.00
Hexachlorobutadiene		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.8	µg/L	1	50.0	106	70 - 130
Toluene-d8		47.7	µg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		47.9	µg/L	1	50.0	96	70 - 130

Sample: 41257 - HLSF-0154-TB-358

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11984	Date Analyzed:	2004-08-13	Analyzed By:	JG
Prep Batch:	10588	Date Prepared:	2004-08-13	Prepared By:	JG

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

continued . . .

sample 41257 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.5	μg/L	1	50.0	105	70 - 130
Toluene-d8		47.8	μg/L	1	50.0	96	70 - 130
4-Bromofluorobenzene (4-BFB)		48.0	μg/L	1	50.0	96	70 - 130

Sample: 41285 - HLSF-0154-HCF-001-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12096	Date Analyzed:	2004-08-16	Analyzed By:	JG
Prep Batch:	10692	Date Prepared:	2004-08-16	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		1.52	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00

continued . . .

sample 41285 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		6.68	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		6.15	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		1.68	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		32.4	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.5	μg/L	1	50.0	101	70 - 130
Toluene-d8		46.2	μg/L	1	50.0	92	70 - 130
4-Bromofluorobenzene (4-BFB)		43.7	μg/L	1	50.0	87	70 - 130

Sample: 41286 - HLSF-0154-TB-359

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12091	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10687	Date Prepared:	2004-08-17	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		28.2	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00

continued . . .

sample 41286 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		2.15	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		<1.00	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00

continued . . .

sample 41286 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5.00
Naphthalene		<5.00	µg/L	1	5.00
Hexachlorobutadiene		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.9	µg/L	1	50.0	106	70 - 130
Toluene-d8		47.9	µg/L	1	50.0	96	70 - 130
4-Bromofluorobenzene (4-BFB)		47.5	µg/L	1	50.0	95	70 - 130

Sample: 41287 - HLSF-0154-FB-359

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12096	Date Analyzed:	2004-08-16	Analyzed By:	JG
Prep Batch:	10692	Date Prepared:	2004-08-16	Prepared By:	JG

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

continued . . .

sample 41287 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.1	μg/L	1	50.0	100	70 - 130
Toluene-d8		46.0	μg/L	1	50.0	92	70 - 130
4-Bromofluorobenzene (4-BFB)		43.3	μg/L	1	50.0	87	70 - 130

Sample: 41282 - HLSF-0154-DRW-013-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12096	Date Analyzed:	2004-08-16	Analyzed By:	JG

Prep Batch: 10692 Date Prepared: 2004-08-16 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		2.79	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		4.65	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00

continued . . .

sample 41282 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Isopropylbenzene		<1.00	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		1.13	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.9	μg/L	1	50.0	102	70 - 130
Toluene-d8		46.2	μg/L	1	50.0	92	70 - 130
4-Bromofluorobenzene (4-BFB)		44.1	μg/L	1	50.0	88	70 - 130

Sample: 41283 - HLSF-0154-TB-357

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12096	Date Analyzed:	2004-08-16	Analyzed By:	JG
Prep Batch:	10692	Date Prepared:	2004-08-16	Prepared By:	JG

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

continued . . .

sample 41283 continued . . .

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

continued . . .

sample 41283 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.4	μg/L	1	50.0	99	70 - 130
Toluene-d8		45.7	μg/L	1	50.0	91	70 - 130
4-Bromofluorobenzene (4-BFB)		43.5	μg/L	1	50.0	87	70 - 130

Sample: 41284 - HLSF-0154-FB-357

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12096	Date Analyzed:	2004-08-16	Analyzed By:	JG
Prep Batch:	10692	Date Prepared:	2004-08-16	Prepared By:	JG

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

continued . . .

sample 41284 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.8	μg/L	1	50.0	100	70 - 130
Toluene-d8		45.8	μg/L	1	50.0	92	70 - 130
4-Bromofluorobenzene (4-BFB)		43.8	μg/L	1	50.0	88	70 - 130

Sample: 41385 - HLSF-0154-DRW-003-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12057	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10658	Date Prepared:	2004-08-17	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		1.31	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		4.86	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		48.1	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		1.22	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		10.7	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		2.30	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
Isopropylbenzene		4.02	µg/L	1	1.00

continued . . .

sample 41385 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		1.15	μg/L	1	1.00
1,3,5-Trimethylbenzene		7.59	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		9.46	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		5.27	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		3.15	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		1.34	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		22.4	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.2	μg/L	1	50.0	104	70 - 130
Toluene-d8		46.1	μg/L	1	50.0	92	70 - 130
4-Bromofluorobenzene (4-BFB)		42.8	μg/L	1	50.0	86	70 - 130

Sample: 41386 - HLSF-0154-TB-352

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12094	Date Analyzed:	2004-08-18	Analyzed By:	JG
Prep Batch:	10690	Date Prepared:	2004-08-18	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		32.8	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		1.14	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00

continued . . .

sample 41386 continued . . .

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

continued . . .

sample 41386 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.5	μg/L	1	50.0	107	70 - 130
Toluene-d8		47.4	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		47.7	μg/L	1	50.0	95	70 - 130

Sample: 41387 - HLSF-0154-FB-352

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12057	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10658	Date Prepared:	2004-08-17	Prepared By:	JG

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

continued . . .

sample 41387 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.3	µg/L	1	50.0	105	70 - 130
Toluene-d8		45.9	µg/L	1	50.0	92	70 - 130
4-Bromofluorobenzene (4-BFB)		43.1	µg/L	1	50.0	86	70 - 130

Sample: 41388 - HLSF-0154-DRW-103-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12057	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10658	Date Prepared:	2004-08-17	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		1.48	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		4.86	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		47.8	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		1.24	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		10.5	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		2.36	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
Isopropylbenzene		4.10	µg/L	1	1.00

continued . . .

sample 41388 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		1.16	μg/L	1	1.00
1,3,5-Trimethylbenzene		7.59	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		9.26	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		5.28	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		3.19	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		1.42	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		22.0	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.9	μg/L	1	50.0	106	70 - 130
Toluene-d8		45.8	μg/L	1	50.0	92	70 - 130
4-Bromofluorobenzene (4-BFB)		42.7	μg/L	1	50.0	85	70 - 130

Sample: 41389 - HLSF-0154-TB-353

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12094	Date Analyzed:	2004-08-18	Analyzed By:	JG
Prep Batch:	10690	Date Prepared:	2004-08-18	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		28.3	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		3.10	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00

continued . . .

sample 41389 continued . . .

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

continued . . .

sample 41389 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.7	µg/L	1	50.0	107	70 - 130
Toluene-d8		47.6	µg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		47.5	µg/L	1	50.0	95	70 - 130

Sample: 41390 - HLSF-0154-DRW-004-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12057	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10658	Date Prepared:	2004-08-17	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		3.56	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		8.70	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		125	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		5.94	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00

continued . . .

sample 41390 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		4.31	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		4.15	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.2	μg/L	1	50.0	106	70 - 130
Toluene-d8		46.4	μg/L	1	50.0	93	70 - 130
4-Bromofluorobenzene (4-BFB)		43.4	μg/L	1	50.0	87	70 - 130

Sample: 41391 - HLSF-0154-TB-354

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12057	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10658	Date Prepared:	2004-08-17	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		22.6	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		1.25	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
Isopropylbenzene		<1.00	µg/L	1	1.00

continued . . .

sample 41391 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.4	μg/L	1	50.0	105	70 - 130
Toluene-d8		45.5	μg/L	1	50.0	91	70 - 130
4-Bromofluorobenzene (4-BFB)		43.0	μg/L	1	50.0	86	70 - 130

Sample: 41392 - HLSF-0154-FB-354

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12057	Date Analyzed:	2004-08-17	Analyzed By:	JG
Prep Batch:	10658	Date Prepared:	2004-08-17	Prepared By:	JG

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

continued . . .

sample 41392 continued . . .

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

continued . . .

sample 41392 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.6	μg/L	1	50.0	105	70 - 130
Toluene-d8		45.6	μg/L	1	50.0	91	70 - 130
4-Bromofluorobenzene (4-BFB)		42.7	μg/L	1	50.0	85	70 - 130

Sample: 41702 - HLSF-0154-DRW-001-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12177	Date Analyzed:	2004-08-20	Analyzed By:	JG
Prep Batch:	10758	Date Prepared:	2004-08-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		1.52	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		10.4	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		37.9	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		30.3	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00

continued . . .

sample 41702 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		3.55	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		4.81	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		2.53	μg/L	1	1.00
1,3,5-Trimethylbenzene		1.44	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		6.41	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		5.68	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		1.84	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		53.4	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.6	μg/L	1	50.0	109	70 - 130
Toluene-d8		47.4	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		50.0	μg/L	1	50.0	100	70 - 130

Sample: 41703 - HLSF-0154-TB-350

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12177	Date Analyzed:	2004-08-20	Analyzed By:	JG
Prep Batch:	10758	Date Prepared:	2004-08-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane	*Not entered*	<1.00	μg/L	1	1.00
Dichlorodifluoromethane	*Not entered*	<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)	*Not entered*	<1.00	μg/L	1	1.00
Vinyl Chloride	*Not entered*	<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)	*Not entered*	<5.00	μg/L	1	5.00
Chloroethane	*Not entered*	<1.00	μg/L	1	1.00
Trichlorofluoromethane	*Not entered*	<1.00	μg/L	1	1.00
Acetone	*Not entered*	<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)	*Not entered*	<5.00	μg/L	1	5.00
Carbon Disulfide	*Not entered*	<1.00	μg/L	1	1.00
Acrylonitrile	*Not entered*	<1.00	μg/L	1	1.00
2-Butanone (MEK)	*Not entered*	<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)	*Not entered*	<5.00	μg/L	1	5.00
2-Hexanone	*Not entered*	<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene	*Not entered*	<10.0	μg/L	1	10.0
1,1-Dichloroethene	*Not entered*	<1.00	μg/L	1	1.00
Methylene chloride	*Not entered*	<5.00	μg/L	1	5.00
MTBE	*Not entered*	<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene	*Not entered*	<1.00	μg/L	1	1.00
1,1-Dichloroethane	*Not entered*	<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene	*Not entered*	<1.00	μg/L	1	1.00
2,2-Dichloropropane	*Not entered*	<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)	*Not entered*	<1.00	μg/L	1	1.00
Chloroform	*Not entered*	<1.00	μg/L	1	1.00
1,1,1-Trichloroethane	*Not entered*	<1.00	μg/L	1	1.00
1,1-Dichloropropene	*Not entered*	<1.00	μg/L	1	1.00
Benzene	*Not entered*	<1.00	μg/L	1	1.00
Carbon Tetrachloride	*Not entered*	<1.00	μg/L	1	1.00
1,2-Dichloropropane	*Not entered*	<1.00	μg/L	1	1.00
Trichloroethene (TCE)	*Not entered*	<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)	*Not entered*	<1.00	μg/L	1	1.00
Bromodichloromethane	*Not entered*	<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether	*Not entered*	<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene	*Not entered*	<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene	*Not entered*	<1.00	μg/L	1	1.00
Toluene	*Not entered*	<1.00	μg/L	1	1.00
1,1,2-Trichloroethane	*Not entered*	<1.00	μg/L	1	1.00
1,3-Dichloropropane	*Not entered*	<1.00	μg/L	1	1.00
Dibromochloromethane	*Not entered*	<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)	*Not entered*	<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)	*Not entered*	<1.00	μg/L	1	1.00
Chlorobenzene	*Not entered*	<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane	*Not entered*	<1.00	μg/L	1	1.00
Ethylbenzene	*Not entered*	<1.00	μg/L	1	1.00
m,p-Xylene	*Not entered*	<1.00	μg/L	1	1.00
Bromoform	*Not entered*	<1.00	μg/L	1	1.00
Styrene	*Not entered*	<1.00	μg/L	1	1.00
o-Xylene	*Not entered*	<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane	*Not entered*	<1.00	μg/L	1	1.00
2-Chlorotoluene	*Not entered*	<1.00	μg/L	1	1.00
1,2,3-Trichloropropane	*Not entered*	<1.00	μg/L	1	1.00
Isopropylbenzene	*Not entered*	<1.00	μg/L	1	1.00

continued . . .

sample 41703 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bromobenzene	*Not entered*	<1.00	μg/L	1	1.00
n-Propylbenzene	*Not entered*	<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene	*Not entered*	<1.00	μg/L	1	1.00
tert-Butylbenzene	*Not entered*	<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene	*Not entered*	<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)	*Not entered*	<1.00	μg/L	1	1.00
sec-Butylbenzene	*Not entered*	<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)	*Not entered*	<1.00	μg/L	1	1.00
p-Isopropyltoluene	*Not entered*	<1.00	μg/L	1	1.00
4-Chlorotoluene	*Not entered*	<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)	*Not entered*	<1.00	μg/L	1	1.00
n-Butylbenzene	*Not entered*	<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane	*Not entered*	<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene	*Not entered*	<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene	*Not entered*	<5.00	μg/L	1	5.00
Naphthalene	*Not entered*	<5.00	μg/L	1	5.00
Hexachlorobutadiene	*Not entered*	<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane	*Not entered*	0	μg/L	1	50.0		70 - 130
Toluene-d8	*Not entered*	0	μg/L	1	50.0		70 - 130
4-Bromofluorobenzene (4-BFB)	*Not entered*	0	μg/L	1	50.0		70 - 130

Sample: 41704 - HLSF-0154-HCF-007-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12177	Date Analyzed:	2004-08-20	Analyzed By:	JG
Prep Batch:	10758	Date Prepared:	2004-08-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<50.0	μg/L	50	1.00
Dichlorodifluoromethane		<50.0	μg/L	50	1.00
Chloromethane (methyl chloride)		<50.0	μg/L	50	1.00
Vinyl Chloride		<50.0	μg/L	50	1.00
Bromomethane (methyl bromide)		<250	μg/L	50	5.00
Chloroethane		<50.0	μg/L	50	1.00
Trichlorofluoromethane		<50.0	μg/L	50	1.00
Acetone		<500	μg/L	50	10.0
Iodomethane (methyl iodide)		<250	μg/L	50	5.00
Carbon Disulfide		<50.0	μg/L	50	1.00
Acrylonitrile		<50.0	μg/L	50	1.00
2-Butanone (MEK)		<250	μg/L	50	5.00
4-Methyl-2-pentanone (MIBK)		<250	μg/L	50	5.00
2-Hexanone		<250	μg/L	50	5.00
trans 1,4-Dichloro-2-butene		<500	μg/L	50	10.0
1,1-Dichloroethene		<50.0	μg/L	50	1.00
Methylene chloride		<250	μg/L	50	5.00

continued . . .

sample 41704 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
MTBE		<50.0	μg/L	50	1.00
trans-1,2-Dichloroethene		<50.0	μg/L	50	1.00
1,1-Dichloroethane		64.0	μg/L	50	1.00
cis-1,2-Dichloroethene		<50.0	μg/L	50	1.00
2,2-Dichloropropane		<50.0	μg/L	50	1.00
1,2-Dichloroethane (EDC)		<50.0	μg/L	50	1.00
Chloroform		<50.0	μg/L	50	1.00
1,1,1-Trichloroethane		<50.0	μg/L	50	1.00
1,1-Dichloropropene		<50.0	μg/L	50	1.00
Benzene		<50.0	μg/L	50	1.00
Carbon Tetrachloride		<50.0	μg/L	50	1.00
1,2-Dichloropropane		<50.0	μg/L	50	1.00
Trichloroethene (TCE)		<50.0	μg/L	50	1.00
Dibromomethane (methylene bromide)		<50.0	μg/L	50	1.00
Bromodichloromethane		<50.0	μg/L	50	1.00
2-Chloroethyl vinyl ether		<250	μg/L	50	5.00
cis-1,3-Dichloropropene		<50.0	μg/L	50	1.00
trans-1,3-Dichloropropene		<50.0	μg/L	50	1.00
Toluene		<50.0	μg/L	50	1.00
1,1,2-Trichloroethane		<50.0	μg/L	50	1.00
1,3-Dichloropropane		<50.0	μg/L	50	1.00
Dibromochloromethane		<50.0	μg/L	50	1.00
1,2-Dibromoethane (EDB)		<50.0	μg/L	50	1.00
Tetrachloroethene (PCE)		<50.0	μg/L	50	1.00
Chlorobenzene		<50.0	μg/L	50	1.00
1,1,1,2-Tetrachloroethane		<50.0	μg/L	50	1.00
Ethylbenzene		<50.0	μg/L	50	1.00
m,p-Xylene		<50.0	μg/L	50	1.00
Bromoform		<50.0	μg/L	50	1.00
Styrene		<50.0	μg/L	50	1.00
o-Xylene		<50.0	μg/L	50	1.00
1,1,2,2-Tetrachloroethane		<50.0	μg/L	50	1.00
2-Chlorotoluene		<50.0	μg/L	50	1.00
1,2,3-Trichloropropane		<50.0	μg/L	50	1.00
Isopropylbenzene		<50.0	μg/L	50	1.00
Bromobenzene		<50.0	μg/L	50	1.00
n-Propylbenzene		<50.0	μg/L	50	1.00
1,3,5-Trimethylbenzene		<50.0	μg/L	50	1.00
tert-Butylbenzene		<50.0	μg/L	50	1.00
1,2,4-Trimethylbenzene		68.5	μg/L	50	1.00
1,4-Dichlorobenzene (para)		<50.0	μg/L	50	1.00
sec-Butylbenzene		<50.0	μg/L	50	1.00
1,3-Dichlorobenzene (meta)		<50.0	μg/L	50	1.00
p-Isopropyltoluene		<50.0	μg/L	50	1.00
4-Chlorotoluene		<50.0	μg/L	50	1.00
1,2-Dichlorobenzene (ortho)		<50.0	μg/L	50	1.00
n-Butylbenzene		<50.0	μg/L	50	1.00
1,2-Dibromo-3-chloropropane		<250	μg/L	50	5.00
1,2,3-Trichlorobenzene		<250	μg/L	50	5.00
1,2,4-Trichlorobenzene		<250	μg/L	50	5.00
Naphthalene		<250	μg/L	50	5.00

continued . . .

sample 41704 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<250	μg/L	50	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.5	μg/L	1	50.0	109	70 - 130
Toluene-d8		46.8	μg/L	1	50.0	94	70 - 130
4-Bromofluorobenzene (4-BFB)		47.3	μg/L	1	50.0	95	70 - 130

Sample: 41705 - HLSF-0154-TB-362

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12177	Date Analyzed:	2004-08-20	Analyzed By:	JG
Prep Batch:	10758	Date Prepared:	2004-08-20	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		3.31	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00

continued . . .

sample 41705 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.2	µg/L	1	50.0	106	70 - 130
Toluene-d8		47.2	µg/L	1	50.0	94	70 - 130
4-Bromofluorobenzene (4-BFB)		47.3	µg/L	1	50.0	95	70 - 130

Sample: 41886 - HLSF-0154-DRW-002-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12181	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10764	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<10.0	μg/L	10	1.00
Dichlorodifluoromethane		<10.0	μg/L	10	1.00
Chloromethane (methyl chloride)		<10.0	μg/L	10	1.00
Vinyl Chloride		<10.0	μg/L	10	1.00
Bromomethane (methyl bromide)		<50.0	μg/L	10	5.00
Chloroethane		<10.0	μg/L	10	1.00
Trichlorofluoromethane		<10.0	μg/L	10	1.00
Acetone		<100	μg/L	10	10.0
Iodomethane (methyl iodide)		<50.0	μg/L	10	5.00
Carbon Disulfide		<10.0	μg/L	10	1.00
Acrylonitrile		<10.0	μg/L	10	1.00
2-Butanone (MEK)		<50.0	μg/L	10	5.00
4-Methyl-2-pentanone (MIBK)		<50.0	μg/L	10	5.00
2-Hexanone		<50.0	μg/L	10	5.00
trans 1,4-Dichloro-2-butene		<100	μg/L	10	10.0
1,1-Dichloroethene		<10.0	μg/L	10	1.00
Methylene chloride		<50.0	μg/L	10	5.00
MTBE		<10.0	μg/L	10	1.00
trans-1,2-Dichloroethene		<10.0	μg/L	10	1.00
1,1-Dichloroethane		71.7	μg/L	10	1.00
cis-1,2-Dichloroethene		<10.0	μg/L	10	1.00
2,2-Dichloropropane		<10.0	μg/L	10	1.00
1,2-Dichloroethane (EDC)		<10.0	μg/L	10	1.00
Chloroform		<10.0	μg/L	10	1.00
1,1,1-Trichloroethane		<10.0	μg/L	10	1.00
1,1-Dichloropropene		<10.0	μg/L	10	1.00
Benzene		60.2	μg/L	10	1.00
Carbon Tetrachloride		<10.0	μg/L	10	1.00
1,2-Dichloropropane		<10.0	μg/L	10	1.00
Trichloroethene (TCE)		<10.0	μg/L	10	1.00
Dibromomethane (methylene bromide)		<10.0	μg/L	10	1.00
Bromodichloromethane		<10.0	μg/L	10	1.00
2-Chloroethyl vinyl ether		<50.0	μg/L	10	5.00
cis-1,3-Dichloropropene		<10.0	μg/L	10	1.00
trans-1,3-Dichloropropene		<10.0	μg/L	10	1.00
Toluene		<10.0	μg/L	10	1.00
1,1,2-Trichloroethane		<10.0	μg/L	10	1.00
1,3-Dichloropropane		<10.0	μg/L	10	1.00
Dibromochloromethane		<10.0	μg/L	10	1.00
1,2-Dibromoethane (EDB)		<10.0	μg/L	10	1.00
Tetrachloroethene (PCE)		<10.0	μg/L	10	1.00
Chlorobenzene		<10.0	μg/L	10	1.00
1,1,1,2-Tetrachloroethane		<10.0	μg/L	10	1.00
Ethylbenzene		<10.0	μg/L	10	1.00
m,p-Xylene		<10.0	μg/L	10	1.00
Bromoform		<10.0	μg/L	10	1.00
Styrene		<10.0	μg/L	10	1.00
o-Xylene		<10.0	μg/L	10	1.00
1,1,2,2-Tetrachloroethane		<10.0	μg/L	10	1.00
2-Chlorotoluene		<10.0	μg/L	10	1.00
1,2,3-Trichloropropane		<10.0	μg/L	10	1.00
Isopropylbenzene		<10.0	μg/L	10	1.00

continued . . .

sample 41886 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bromobenzene		<10.0	μg/L	10	1.00
n-Propylbenzene		<10.0	μg/L	10	1.00
1,3,5-Trimethylbenzene		12.1	μg/L	10	1.00
tert-Butylbenzene		<10.0	μg/L	10	1.00
1,2,4-Trimethylbenzene		48.4	μg/L	10	1.00
1,4-Dichlorobenzene (para)		<10.0	μg/L	10	1.00
sec-Butylbenzene		<10.0	μg/L	10	1.00
1,3-Dichlorobenzene (meta)		<10.0	μg/L	10	1.00
p-Isopropyltoluene		<10.0	μg/L	10	1.00
4-Chlorotoluene		<10.0	μg/L	10	1.00
1,2-Dichlorobenzene (ortho)		<10.0	μg/L	10	1.00
n-Butylbenzene		<10.0	μg/L	10	1.00
1,2-Dibromo-3-chloropropane		<50.0	μg/L	10	5.00
1,2,3-Trichlorobenzene		<50.0	μg/L	10	5.00
1,2,4-Trichlorobenzene		<50.0	μg/L	10	5.00
Naphthalene		106	μg/L	10	5.00
Hexachlorobutadiene		<50.0	μg/L	10	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.0	μg/L	1	50.0	104	70 - 130
Toluene-d8		46.6	μg/L	1	50.0	93	70 - 130
4-Bromofluorobenzene (4-BFB)		49.6	μg/L	1	50.0	99	70 - 130

Sample: 41887 - HLSF-0154-TB-351

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12181	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10764	Date Prepared:	2004-08-23	Prepared By:	JG

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

continued . . .

sample 41887 continued . . .

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

continued . . .

sample 41887 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.2	µg/L	1	50.0	102	70 - 130
Toluene-d8		47.3	µg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		48.7	µg/L	1	50.0	97	70 - 130

Sample: 41888 - HLSF-0154-HCF-105-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12181	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10764	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<5.00	µg/L	5	1.00
Dichlorodifluoromethane		<5.00	µg/L	5	1.00
Chloromethane (methyl chloride)		<5.00	µg/L	5	1.00
Vinyl Chloride		<5.00	µg/L	5	1.00
Bromomethane (methyl bromide)		<25.0	µg/L	5	5.00
Chloroethane		<5.00	µg/L	5	1.00
Trichlorofluoromethane		<5.00	µg/L	5	1.00
Acetone		<50.0	µg/L	5	10.0
Iodomethane (methyl iodide)		<25.0	µg/L	5	5.00
Carbon Disulfide		<5.00	µg/L	5	1.00
Acrylonitrile		<5.00	µg/L	5	1.00
2-Butanone (MEK)		<25.0	µg/L	5	5.00
4-Methyl-2-pentanone (MIBK)		<25.0	µg/L	5	5.00
2-Hexanone		<25.0	µg/L	5	5.00
trans 1,4-Dichloro-2-butene		<50.0	µg/L	5	10.0
1,1-Dichloroethene		<5.00	µg/L	5	1.00
Methylene chloride		<25.0	µg/L	5	5.00
MTBE		<5.00	µg/L	5	1.00
trans-1,2-Dichloroethene		<5.00	µg/L	5	1.00
1,1-Dichloroethane		15.5	µg/L	5	1.00
cis-1,2-Dichloroethene		<5.00	µg/L	5	1.00
2,2-Dichloropropane		<5.00	µg/L	5	1.00
1,2-Dichloroethane (EDC)		<5.00	µg/L	5	1.00
Chloroform		<5.00	µg/L	5	1.00
1,1,1-Trichloroethane		<5.00	µg/L	5	1.00
1,1-Dichloropropene		<5.00	µg/L	5	1.00
Benzene		37.2	µg/L	5	1.00
Carbon Tetrachloride		<5.00	µg/L	5	1.00
1,2-Dichloropropane		<5.00	µg/L	5	1.00
Trichloroethene (TCE)		<5.00	µg/L	5	1.00
Dibromomethane (methylene bromide)		<5.00	µg/L	5	1.00
Bromodichloromethane		<5.00	µg/L	5	1.00
2-Chloroethyl vinyl ether		<25.0	µg/L	5	5.00

continued . . .

sample 41888 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
cis-1,3-Dichloropropene		<5.00	μg/L	5	1.00
trans-1,3-Dichloropropene		<5.00	μg/L	5	1.00
Toluene		<5.00	μg/L	5	1.00
1,1,2-Trichloroethane		<5.00	μg/L	5	1.00
1,3-Dichloropropane		<5.00	μg/L	5	1.00
Dibromochloromethane		<5.00	μg/L	5	1.00
1,2-Dibromoethane (EDB)		<5.00	μg/L	5	1.00
Tetrachloroethene (PCE)		<5.00	μg/L	5	1.00
Chlorobenzene		<5.00	μg/L	5	1.00
1,1,1,2-Tetrachloroethane		<5.00	μg/L	5	1.00
Ethylbenzene		<5.00	μg/L	5	1.00
m,p-Xylene		<5.00	μg/L	5	1.00
Bromoform		<5.00	μg/L	5	1.00
Styrene		<5.00	μg/L	5	1.00
o-Xylene		<5.00	μg/L	5	1.00
1,1,2,2-Tetrachloroethane		<5.00	μg/L	5	1.00
2-Chlorotoluene		<5.00	μg/L	5	1.00
1,2,3-Trichloropropane		<5.00	μg/L	5	1.00
Isopropylbenzene		<5.00	μg/L	5	1.00
Bromobenzene		<5.00	μg/L	5	1.00
n-Propylbenzene		<5.00	μg/L	5	1.00
1,3,5-Trimethylbenzene		<5.00	μg/L	5	1.00
tert-Butylbenzene		<5.00	μg/L	5	1.00
1,2,4-Trimethylbenzene		13.4	μg/L	5	1.00
1,4-Dichlorobenzene (para)		<5.00	μg/L	5	1.00
sec-Butylbenzene		<5.00	μg/L	5	1.00
1,3-Dichlorobenzene (meta)		<5.00	μg/L	5	1.00
p-Isopropyltoluene		<5.00	μg/L	5	1.00
4-Chlorotoluene		<5.00	μg/L	5	1.00
1,2-Dichlorobenzene (ortho)		<5.00	μg/L	5	1.00
n-Butylbenzene		<5.00	μg/L	5	1.00
1,2-Dibromo-3-chloropropane		<25.0	μg/L	5	5.00
1,2,3-Trichlorobenzene		<25.0	μg/L	5	5.00
1,2,4-Trichlorobenzene		<25.0	μg/L	5	5.00
Naphthalene		67.6	μg/L	5	5.00
Hexachlorobutadiene		<25.0	μg/L	5	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.4	μg/L	1	50.0	103	70 - 130
Toluene-d8		47.2	μg/L	1	50.0	94	70 - 130
4-Bromofluorobenzene (4-BFB)		49.8	μg/L	1	50.0	100	70 - 130

Sample: 41889 - HLSF-0154-TB-361

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12181	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10764	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		3.86	µg/L	1	1.00
Acetone		36.8	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
Isopropylbenzene		<1.00	µg/L	1	1.00

continued . . .

sample 41889 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.0	μg/L	1	50.0	104	70 - 130
Toluene-d8		46.9	μg/L	1	50.0	94	70 - 130
4-Bromofluorobenzene (4-BFB)		49.4	μg/L	1	50.0	99	70 - 130

Sample: 41890 - HLSF-0154-HCF-005-0804

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12181	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10764	Date Prepared:	2004-08-23	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<10.0	μg/L	10	1.00
Dichlorodifluoromethane		<10.0	μg/L	10	1.00
Chloromethane (methyl chloride)		<10.0	μg/L	10	1.00
Vinyl Chloride		<10.0	μg/L	10	1.00
Bromomethane (methyl bromide)		<50.0	μg/L	10	5.00
Chloroethane		<10.0	μg/L	10	1.00
Trichlorofluoromethane		<10.0	μg/L	10	1.00
Acetone		<100	μg/L	10	10.0
Iodomethane (methyl iodide)		<50.0	μg/L	10	5.00
Carbon Disulfide		<10.0	μg/L	10	1.00
Acrylonitrile		<10.0	μg/L	10	1.00
2-Butanone (MEK)		<50.0	μg/L	10	5.00
4-Methyl-2-pentanone (MIBK)		<50.0	μg/L	10	5.00
2-Hexanone		<50.0	μg/L	10	5.00
trans 1,4-Dichloro-2-butene		<100	μg/L	10	10.0
1,1-Dichloroethene		<10.0	μg/L	10	1.00
Methylene chloride		<50.0	μg/L	10	5.00

continued . . .

sample 41890 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
MTBE		<10.0	μg/L	10	1.00
trans-1,2-Dichloroethene		<10.0	μg/L	10	1.00
1,1-Dichloroethane		15.7	μg/L	10	1.00
cis-1,2-Dichloroethene		<10.0	μg/L	10	1.00
2,2-Dichloropropane		<10.0	μg/L	10	1.00
1,2-Dichloroethane (EDC)		<10.0	μg/L	10	1.00
Chloroform		<10.0	μg/L	10	1.00
1,1,1-Trichloroethane		<10.0	μg/L	10	1.00
1,1-Dichloropropene		<10.0	μg/L	10	1.00
Benzene		38.7	μg/L	10	1.00
Carbon Tetrachloride		<10.0	μg/L	10	1.00
1,2-Dichloropropane		<10.0	μg/L	10	1.00
Trichloroethene (TCE)		<10.0	μg/L	10	1.00
Dibromomethane (methylene bromide)		<10.0	μg/L	10	1.00
Bromodichloromethane		<10.0	μg/L	10	1.00
2-Chloroethyl vinyl ether		<50.0	μg/L	10	5.00
cis-1,3-Dichloropropene		<10.0	μg/L	10	1.00
trans-1,3-Dichloropropene		<10.0	μg/L	10	1.00
Toluene		<10.0	μg/L	10	1.00
1,1,2-Trichloroethane		<10.0	μg/L	10	1.00
1,3-Dichloropropane		<10.0	μg/L	10	1.00
Dibromochloromethane		<10.0	μg/L	10	1.00
1,2-Dibromoethane (EDB)		<10.0	μg/L	10	1.00
Tetrachloroethene (PCE)		<10.0	μg/L	10	1.00
Chlorobenzene		<10.0	μg/L	10	1.00
1,1,1,2-Tetrachloroethane		<10.0	μg/L	10	1.00
Ethylbenzene		<10.0	μg/L	10	1.00
m,p-Xylene		<10.0	μg/L	10	1.00
Bromoform		<10.0	μg/L	10	1.00
Styrene		<10.0	μg/L	10	1.00
o-Xylene		<10.0	μg/L	10	1.00
1,1,2,2-Tetrachloroethane		<10.0	μg/L	10	1.00
2-Chlorotoluene		<10.0	μg/L	10	1.00
1,2,3-Trichloropropane		<10.0	μg/L	10	1.00
Isopropylbenzene		<10.0	μg/L	10	1.00
Bromobenzene		<10.0	μg/L	10	1.00
n-Propylbenzene		<10.0	μg/L	10	1.00
1,3,5-Trimethylbenzene		<10.0	μg/L	10	1.00
tert-Butylbenzene		<10.0	μg/L	10	1.00
1,2,4-Trimethylbenzene		13.3	μg/L	10	1.00
1,4-Dichlorobenzene (para)		<10.0	μg/L	10	1.00
sec-Butylbenzene		<10.0	μg/L	10	1.00
1,3-Dichlorobenzene (meta)		<10.0	μg/L	10	1.00
p-Isopropyltoluene		<10.0	μg/L	10	1.00
4-Chlorotoluene		<10.0	μg/L	10	1.00
1,2-Dichlorobenzene (ortho)		<10.0	μg/L	10	1.00
n-Butylbenzene		<10.0	μg/L	10	1.00
1,2-Dibromo-3-chloropropane		<50.0	μg/L	10	5.00
1,2,3-Trichlorobenzene		<50.0	μg/L	10	5.00
1,2,4-Trichlorobenzene		<50.0	μg/L	10	5.00
Naphthalene		110	μg/L	10	5.00

continued . . .

sample 41890 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Hexachlorobutadiene		<50.0	μg/L	10	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.4	μg/L	1	50.0	103	70 - 130
Toluene-d8		46.9	μg/L	1	50.0	94	70 - 130
4-Bromofluorobenzene (4-BFB)		49.5	μg/L	1	50.0	99	70 - 130

Sample: 41891 - HLSF-0154-TB-360

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	12181	Date Analyzed:	2004-08-23	Analyzed By:	JG
Prep Batch:	10764	Date Prepared:	2004-08-23	Prepared By:	JG

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

continued . . .

sample 41891 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.7	μg/L	1	50.0	103	70 - 130
Toluene-d8		46.7	μg/L	1	50.0	93	70 - 130
4-Bromofluorobenzene (4-BFB)		48.9	μg/L	1	50.0	98	70 - 130

Method Blank (1) QC Batch: 11984

Parameter	Flag	Result	Units	RL
Bromochloromethane		<1.00	μg/L	1
Dichlorodifluoromethane		<1.00	μg/L	1

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Chloromethane (methyl chloride)		<1.00	μg/L	1
Vinyl Chloride		<1.00	μg/L	1
Bromomethane (methyl bromide)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.7	μg/L	1	50.0	103	70 - 130
Toluene-d8		48.1	μg/L	1	50.0	96	70 - 130
4-Bromofluorobenzene (4-BFB)		48.9	μg/L	1	50.0	98	70 - 130

Method Blank (1) QC Batch: 12057

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.8	μg/L	1	50.0	104	70 - 130
Toluene-d8		45.7	μg/L	1	50.0	91	70 - 130
4-Bromofluorobenzene (4-BFB)		43.8	μg/L	1	50.0	88	70 - 130

Method Blank (1) QC Batch: 12091

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.3	μg/L	1	50.0	107	70 - 130
Toluene-d8		47.6	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		46.8	μg/L	1	50.0	94	70 - 130

Method Blank (1) QC Batch: 12094

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.1	μg/L	1	50.0	108	70 - 130

continued . . .

method blank continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Toluene-d8		47.5	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		46.6	μg/L	1	50.0	93	70 - 130

Method Blank (1) QC Batch: 12096

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.0	μg/L	1	50.0	98	70 - 130
Toluene-d8		46.0	μg/L	1	50.0	92	70 - 130
4-Bromofluorobenzene (4-BFB)		43.8	μg/L	1	50.0	88	70 - 130

Method Blank (1) QC Batch: 12177

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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
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 (meta)		<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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.2	μg/L	1	50.0	108	70 - 130
Toluene-d8		47.5	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		46.6	μg/L	1	50.0	93	70 - 130

Method Blank (1) QC Batch: 12181

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.2	µg/L	1	50.0	104	70 - 130
Toluene-d8		47.4	µg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		48.2	µg/L	1	50.0	96	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11984

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	98.1	100	µg/L	1	100	<0.136	98	2	70 - 130	20
Benzene	94.6	95.6	µg/L	1	100	0.29	95	1	70 - 130	20
Trichloroethene (TCE)	92.4	94.5	µg/L	1	100	0.16	92	2	70 - 130	20
Toluene	91.0	92.4	µg/L	1	100	0.55	91	2	70 - 130	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chlorobenzene	92.1	93.9	μg/L	1	100	<0.0540	92	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.7	51.0	μg/L	1	50.0	101	102	70 - 130
Toluene-d8	48.6	49.2	μg/L	1	50.0	97	98	70 - 130
4-Bromofluorobenzene (4-BFB)	49.5	49.9	μg/L	1	50.0	99	100	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 12057

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	85.7	86.0	μg/L	1	100	<0.136	86	0	70 - 130	20
Benzene	91.6	91.6	μg/L	1	100	<0.146	92	0	70 - 130	20
Trichloroethene (TCE)	87.4	87.7	μg/L	1	100	<0.117	87	0	70 - 130	20
Toluene	90.7	91.5	μg/L	1	100	0.25	91	1	70 - 130	20
Chlorobenzene	95.1	95.8	μg/L	1	100	<0.0540	95	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	51.5	51.6	μg/L	1	50.0	103	103	70 - 130
Toluene-d8	46.5	45.8	μg/L	1	50.0	93	92	70 - 130
4-Bromofluorobenzene (4-BFB)	43.8	43.2	μg/L	1	50.0	88	86	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 12091

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	102	104	μg/L	1	100	<0.136	102	2	70 - 130	20
Benzene	92.9	95.2	μg/L	1	100	0.16	93	2	70 - 130	20
Trichloroethene (TCE)	92.0	94.5	μg/L	1	100	0.14	92	3	70 - 130	20
Toluene	88.4	91.3	μg/L	1	100	0.27	88	3	70 - 130	20
Chlorobenzene	91.4	93.6	μg/L	1	100	<0.0540	91	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	52.1	52.4	μg/L	1	50.0	104	105	70 - 130
Toluene-d8	48.1	48.9	μg/L	1	50.0	96	98	70 - 130
4-Bromofluorobenzene (4-BFB)	48.2	48.4	μg/L	1	50.0	96	97	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 12094

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	107	109	µg/L	1	100	<0.136	107	2	70 - 130	20
Benzene	94.9	95.6	µg/L	1	100	0.32	95	1	70 - 130	20
Trichloroethene (TCE)	95.0	95.1	µg/L	1	100	0.19	95	0	70 - 130	20
Toluene	92.0	92.1	µg/L	1	100	0.59	92	0	70 - 130	20
Chlorobenzene	94.6	94.2	µg/L	1	100	<0.0540	95	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	53.2	53.9	µg/L	1	50.0	106	108	70 - 130
Toluene-d8	48.2	48.3	µg/L	1	50.0	96	97	70 - 130
4-Bromofluorobenzene (4-BFB)	47.6	47.6	µg/L	1	50.0	95	95	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 12096

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	88.2	91.6	µg/L	1	100	<0.136	88	4	70 - 130	20
Benzene	93.2	97.1	µg/L	1	100	<0.146	93	4	70 - 130	20
Trichloroethene (TCE)	92.0	94.8	µg/L	1	100	<0.117	92	3	70 - 130	20
Toluene	94.4	98.3	µg/L	1	100	0.31	94	4	70 - 130	20
Chlorobenzene	95.4	97.4	µg/L	1	100	<0.0540	95	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	48.5	49.3	µg/L	1	50.0	97	99	70 - 130
Toluene-d8	47.1	46.7	µg/L	1	50.0	94	93	70 - 130
4-Bromofluorobenzene (4-BFB)	45.0	44.5	µg/L	1	50.0	90	89	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 12177

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	110	108	µg/L	1	100	<0.136	110	2	70 - 130	20
Benzene	93.3	92.0	µg/L	1	100	0.22	93	1	70 - 130	20
Trichloroethene (TCE)	98.7	97.3	µg/L	1	100	<0.117	99	1	70 - 130	20
Toluene	94.5	94.0	µg/L	1	100	0.43	94	0	70 - 130	20
Chlorobenzene	94.9	93.9	µg/L	1	100	<0.0540	95	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	53.0	52.8	µg/L	1	50.0	106	106	70 - 130
Toluene-d8	48.3	47.9	µg/L	1	50.0	97	96	70 - 130
4-Bromofluorobenzene (4-BFB)	49.5	49.3	µg/L	1	50.0	99	99	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 12181

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	104	107	μg/L	1	100	0.16	104	3	70 - 130	20
Benzene	96.3	95.0	μg/L	1	100	<0.146	96	1	70 - 130	20
Trichloroethene (TCE)	97.4	97.1	μg/L	1	100	0.17	97	0	70 - 130	20
Toluene	92.1	91.0	μg/L	1	100	0.17	92	1	70 - 130	20
Chlorobenzene	96.0	95.4	μg/L	1	100	<0.0540	96	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	51.3	51.8	μg/L	1	50.0	103	104	70 - 130
Toluene-d8	48.0	47.9	μg/L	1	50.0	96	96	70 - 130
4-Bromofluorobenzene (4-BFB)	49.9	49.4	μg/L	1	50.0	100	99	70 - 130

Standard (CCV-1) QC Batch: 11984

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	56.4	113	80 - 120	2004-08-13
1,1-Dichloroethene		μg/L	50.0	56.1	112	80 - 120	2004-08-13
Chloroform		μg/L	50.0	51.9	104	80 - 120	2004-08-13
1,2-Dichloropropane		μg/L	50.0	50.8	102	80 - 120	2004-08-13
Toluene		μg/L	50.0	51.2	102	80 - 120	2004-08-13
Chlorobenzene		μg/L	50.0	51.0	102	80 - 120	2004-08-13
Ethylbenzene		μg/L	50.0	52.2	104	80 - 120	2004-08-13

Standard (CCV-1) QC Batch: 12057

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	43.4	87	80 - 120	2004-08-17
1,1-Dichloroethene		μg/L	50.0	43.8	88	80 - 120	2004-08-17
Chloroform		μg/L	50.0	47.9	96	80 - 120	2004-08-17
1,2-Dichloropropane		μg/L	50.0	52.1	104	80 - 120	2004-08-17
Toluene		μg/L	50.0	50.0	100	80 - 120	2004-08-17
Chlorobenzene		μg/L	50.0	51.6	103	80 - 120	2004-08-17
Ethylbenzene		μg/L	50.0	46.9	94	80 - 120	2004-08-17

Standard (CCV-1) QC Batch: 12091

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	57.7	115	80 - 120	2004-08-17
1,1-Dichloroethene		μg/L	50.0	57.4	115	80 - 120	2004-08-17
Chloroform		μg/L	50.0	53.1	106	80 - 120	2004-08-17
1,2-Dichloropropane		μg/L	50.0	49.8	100	80 - 120	2004-08-17
Toluene		μg/L	50.0	50.2	100	80 - 120	2004-08-17
Chlorobenzene		μg/L	50.0	50.9	102	80 - 120	2004-08-17

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		µg/L	50.0	51.1	102	80 - 120	2004-08-17

Standard (CCV-1) QC Batch: 12094

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	56.6	113	80 - 120	2004-08-18
1,1-Dichloroethene		µg/L	50.0	56.7	113	80 - 120	2004-08-18
Chloroform		µg/L	50.0	51.5	103	80 - 120	2004-08-18
1,2-Dichloropropane		µg/L	50.0	50.3	101	80 - 120	2004-08-18
Toluene		µg/L	50.0	50.5	101	80 - 120	2004-08-18
Chlorobenzene		µg/L	50.0	50.5	101	80 - 120	2004-08-18
Ethylbenzene		µg/L	50.0	50.7	101	80 - 120	2004-08-18

Standard (CCV-1) QC Batch: 12096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	44.8	90	80 - 120	2004-08-16
1,1-Dichloroethene		µg/L	50.0	44.4	89	80 - 120	2004-08-16
Chloroform		µg/L	50.0	48.0	96	80 - 120	2004-08-16
1,2-Dichloropropane		µg/L	50.0	51.4	103	80 - 120	2004-08-16
Toluene		µg/L	50.0	50.6	101	80 - 120	2004-08-16
Chlorobenzene		µg/L	50.0	51.3	103	80 - 120	2004-08-16
Ethylbenzene		µg/L	50.0	47.4	95	80 - 120	2004-08-16

Standard (CCV-1) QC Batch: 12177

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	56.7	113	80 - 120	2004-08-20
1,1-Dichloroethene		µg/L	50.0	56.0	112	80 - 120	2004-08-20
Chloroform		µg/L	50.0	50.4	101	80 - 120	2004-08-20
1,2-Dichloropropane		µg/L	50.0	49.0	98	80 - 120	2004-08-20
Toluene		µg/L	50.0	49.8	100	80 - 120	2004-08-20
Chlorobenzene		µg/L	50.0	49.3	99	80 - 120	2004-08-20
Ethylbenzene		µg/L	50.0	48.9	98	80 - 120	2004-08-20

Standard (CCV-1) QC Batch: 12181

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	52.8	106	80 - 120	2004-08-23
1,1-Dichloroethene		µg/L	50.0	57.1	114	80 - 120	2004-08-23

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloroform		μg/L	50.0	51.6	103	80 - 120	2004-08-23
1,2-Dichloropropane		μg/L	50.0	50.2	100	80 - 120	2004-08-23
Toluene		μg/L	50.0	49.8	100	80 - 120	2004-08-23
Chlorobenzene		μg/L	50.0	51.3	103	80 - 120	2004-08-23
Ethylbenzene		μg/L	50.0	50.8	102	80 - 120	2004-08-23

Work Order Receipt

Order

Work Order	4020523
Receive Date	at
Requestor	Len Habel - BAE Systems Analytical Solutions Inc.
Invoicing	Len Habel - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20-EE
	Project Location = HELSTF Const. Landfill
	Project Number = 20-EE
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
26797	HLSF-3839-HMW-029-0204	Normal	water	2004-02-04	14:50	25
26798	HLSF-3839-TB-GE-193	Normal	water	2004-02-04	14:50	2

Sample	Test	Method	Prep	Priority	Due Date
26797	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ag, Total	S 6010B	S 3010A	Normal	2004-01-10
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Al, Total	S 6010B	S 3010A	Normal	2004-01-10
	Alkalinity	SM 2320B	N/A	Normal	2004-01-10
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-01-10
	Ammonium Perchlorate	Outside Testing	N/A	Normal	2004-01-10
	As, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	As, Total	S 6010B	S 3010A	Normal	2004-01-10
	B, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	B, Total	S 6010B	S 3010A	Normal	2004-01-10
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ba, Total	S 6010B	S 3010A	Normal	2004-01-10
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Be, Total	S 6010B	S 3010A	Normal	2004-01-10
	Bromide (IC)	E 300.0	N/A	Normal	2004-01-10
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cd, Total	S 6010B	S 3010A	Normal	2004-01-10
	Chloride (IC)	E 300.0	N/A	Normal	2004-01-10
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-01-10
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Co, Total	S 6010B	S 3010A	Normal	2004-01-10
	Conductivity	SM 2510B	N/A	Normal	2004-01-10
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cr, Total	S 6010B	S 3010A	Normal	2004-01-10
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cu, Total	S 6010B	S 3010A	Normal	2004-01-10
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-01-10
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Fe, Total	S 6010B	S 3010A	Normal	2004-01-10
	Fluoride (IC)	E 300.0	N/A	Normal	2004-01-10
	Herbicides	Outside Testing	N/A	Normal	2004-01-10
	Hg, Total	S 7470A	N/A	Normal	2004-01-10
	K, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mn, Total	S 6010B	S 3010A	Normal	2004-01-10

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mo, Total	S 6010B	S 3010A	Normal	2004-01-10
	NO2 (IC)	E 300.0	N/A	Normal	2004-01-10
	NO3 (IC)	E 300.0	N/A	Normal	2004-01-10
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ni, Total	S 6010B	S 3010A	Normal	2004-01-10
	P, Total	S 6010B	S 3010A	Normal	2004-01-10
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Pb, Total	S 6010B	S 3010A	Normal	2004-01-10
	Pesticides	S 8081A	S 3510C	Normal	2004-01-10
	SO4 (IC)	E 300.0	N/A	Normal	2004-01-10
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Se, Total	S 6010B	S 3010A	Normal	2004-01-10
	Semivolatiles	S 8270C	S 3510C	Normal	2004-01-10
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Si, Total	S 6010B	S 3010A	Normal	2004-01-10
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Sn, Total	S 6010B	S 3010A	Normal	2004-01-10
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Sr, Total	S 6010B	S 3010A	Normal	2004-01-10
	TDS	SM 2540C	N/A	Normal	2004-01-10
	TKN	E 351.3	N/A	Normal	2004-01-10
	TOC	E 415.1	N/A	Normal	2004-01-10
	TPH DRO	Mod. 8015B	N/A	Normal	2004-01-10
	TPH GRO	S 8015B	S 5030B	Normal	2004-01-10
	Total Cyanide	SM 4500-CN C,E	N/A	Normal	2004-01-14
	V, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	V, Total	S 6010B	S 3010A	Normal	2004-01-10
	Volatiles	S 8260B	S 5030B	Normal	2004-01-10
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Zn, Total	S 6010B	S 3010A	Normal	2004-01-10
	pH	SM 4500-H+	N/A	Normal	2004-01-10
26798	Volatiles	S 8260B	S 5030B	Normal	2004-01-10

Work Order Receipt

Order

Work Order	4020524
Receive Date	at
Requestor	Len Habel - BAE Systems Analytical Solutions Inc.
Invoicing	Len Habel - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20-EE
	Project Location = HELSTF Const. Landfill
	Project Number = 20-EE
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
26799	HLSF-3839-HMW-033-0204	Normal	water	2004-02-04	14:35	25
26800	HLSF-3839-TB-195	Normal	water	2004-02-04	14:35	2

Sample	Test	Method	Prep	Priority	Due Date
26799	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ag, Total	S 6010B	S 3010A	Normal	2004-01-10
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Al, Total	S 6010B	S 3010A	Normal	2004-01-10
	Alkalinity	SM 2320B	N/A	Normal	2004-01-10
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-01-10
	Ammonium Perchlorate	Outside Testing	N/A	Normal	2004-01-10
	As, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	As, Total	S 6010B	S 3010A	Normal	2004-01-10
	B, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	B, Total	S 6010B	S 3010A	Normal	2004-01-10
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ba, Total	S 6010B	S 3010A	Normal	2004-01-10
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Be, Total	S 6010B	S 3010A	Normal	2004-01-10
	Bromide (IC)	E 300.0	N/A	Normal	2004-01-10
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cd, Total	S 6010B	S 3010A	Normal	2004-01-10
	Chloride (IC)	E 300.0	N/A	Normal	2004-01-10
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-01-10
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Co, Total	S 6010B	S 3010A	Normal	2004-01-10
	Conductivity	SM 2510B	N/A	Normal	2004-01-10
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cr, Total	S 6010B	S 3010A	Normal	2004-01-10
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cu, Total	S 6010B	S 3010A	Normal	2004-01-10
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-01-10
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Fe, Total	S 6010B	S 3010A	Normal	2004-01-10
	Fluoride (IC)	E 300.0	N/A	Normal	2004-01-10
	Herbicides	Outside Testing	N/A	Normal	2004-01-10
	Hg, Total	S 7470A	N/A	Normal	2004-01-10
	K, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mn, Total	S 6010B	S 3010A	Normal	2004-01-10

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mo, Total	S 6010B	S 3010A	Normal	2004-01-10
	NO2 (IC)	E 300.0	N/A	Normal	2004-01-10
	NO3 (IC)	E 300.0	N/A	Normal	2004-01-10
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ni, Total	S 6010B	S 3010A	Normal	2004-01-10
	P, Total	S 6010B	S 3010A	Normal	2004-01-10
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Pb, Total	S 6010B	S 3010A	Normal	2004-01-10
	Pesticides	S 8081A	S 3510C	Normal	2004-01-10
	SO4 (IC)	E 300.0	N/A	Normal	2004-01-10
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Se, Total	S 6010B	S 3010A	Normal	2004-01-10
	Semivolatiles	S 8270C	S 3510C	Normal	2004-01-10
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Si, Total	S 6010B	S 3010A	Normal	2004-01-10
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Sn, Total	S 6010B	S 3010A	Normal	2004-01-10
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Sr, Total	S 6010B	S 3010A	Normal	2004-01-10
	TDS	SM 2540C	N/A	Normal	2004-01-10
	TKN	E 351.3	N/A	Normal	2004-01-10
	TOC	E 415.1	N/A	Normal	2004-01-10
	TPH DRO	Mod. 8015B	N/A	Normal	2004-01-10
	TPH GRO	S 8015B	S 5030B	Normal	2004-01-10
	Total Cyanide	SM 4500-CN C,E	N/A	Normal	2004-01-14
	V, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	V, Total	S 6010B	S 3010A	Normal	2004-01-10
	Volatiles	S 8260B	S 5030B	Normal	2004-01-10
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Zn, Total	S 6010B	S 3010A	Normal	2004-01-10
	pH	SM 4500-H+	N/A	Normal	2004-01-10
26800	Volatiles	S 8260B	S 5030B	Normal	2004-01-10

Work Order Receipt

Order

Work Order	4020525
Receive Date	at
Requestor	Len Habel - BAE Systems Analytical Solutions Inc.
Invoicing	Len Habel - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20-EE
	Project Location = HELSTF Const. Landfill
	Project Number = 20-EE
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
26801	HLSF-3839-HMW-034-0204	Normal	water	2004-02-04	12:15	24
26802	HLSF-3839-TB-0204-197	Normal	water	2004-02-04	12:15	2

Sample	Test	Method	Prep	Priority	Due Date
26801	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ag, Total	S 6010B	S 3010A	Normal	2004-01-10
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Al, Total	S 6010B	S 3010A	Normal	2004-01-10
	Alkalinity	SM 2320B	N/A	Normal	2004-01-10
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-01-10
	Ammonium Perchlorate	Outside Testing	N/A	Normal	2004-01-10
	As, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	As, Total	S 6010B	S 3010A	Normal	2004-01-10
	B, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	B, Total	S 6010B	S 3010A	Normal	2004-01-10
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ba, Total	S 6010B	S 3010A	Normal	2004-01-10
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Be, Total	S 6010B	S 3010A	Normal	2004-01-10
	Bromide (IC)	E 300.0	N/A	Normal	2004-01-10
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cd, Total	S 6010B	S 3010A	Normal	2004-01-10
	Chloride (IC)	E 300.0	N/A	Normal	2004-01-10
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-01-10
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Co, Total	S 6010B	S 3010A	Normal	2004-01-10
	Conductivity	SM 2510B	N/A	Normal	2004-01-10
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cr, Total	S 6010B	S 3010A	Normal	2004-01-10
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cu, Total	S 6010B	S 3010A	Normal	2004-01-10
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-01-10
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Fe, Total	S 6010B	S 3010A	Normal	2004-01-10
	Fluoride (IC)	E 300.0	N/A	Normal	2004-01-10
	Herbicides	Outside Testing	N/A	Normal	2004-01-10
	Hg, Total	S 7470A	N/A	Normal	2004-01-10
	K, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mn, Total	S 6010B	S 3010A	Normal	2004-01-10

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mo, Total	S 6010B	S 3010A	Normal	2004-01-10
	NO2 (IC)	E 300.0	N/A	Normal	2004-01-10
	NO3 (IC)	E 300.0	N/A	Normal	2004-01-10
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ni, Total	S 6010B	S 3010A	Normal	2004-01-10
	P, Total	S 6010B	S 3010A	Normal	2004-01-10
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Pb, Total	S 6010B	S 3010A	Normal	2004-01-10
	Pesticides	S 8081A	S 3510C	Normal	2004-01-10
	SO4 (IC)	E 300.0	N/A	Normal	2004-01-10
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Se, Total	S 6010B	S 3010A	Normal	2004-01-10
	Semivolatiles	S 8270C	S 3510C	Normal	2004-01-10
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Si, Total	S 6010B	S 3010A	Normal	2004-01-10
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Sn, Total	S 6010B	S 3010A	Normal	2004-01-10
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Sr, Total	S 6010B	S 3010A	Normal	2004-01-10
	TDS	SM 2540C	N/A	Normal	2004-01-10
	TKN	E 351.3	N/A	Normal	2004-01-10
	TOC	E 415.1	N/A	Normal	2004-01-10
	TPH DRO	Mod. 8015B	N/A	Normal	2004-01-10
	TPH GRO	S 8015B	S 5030B	Normal	2004-01-10
	Total Cyanide	SM 4500-CN C,E	N/A	Normal	2004-01-14
	V, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	V, Total	S 6010B	S 3010A	Normal	2004-01-10
	Volatiles	S 8260B	S 5030B	Normal	2004-01-10
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Zn, Total	S 6010B	S 3010A	Normal	2004-01-10
	pH	SM 4500-H+	N/A	Normal	2004-01-10
26802	Volatiles	S 8260B	S 5030B	Normal	2004-01-10

Work Order Receipt

Order

Work Order	4020526
Receive Date	at
Requestor	Len Habel - BAE Systems Analytical Solutions Inc.
Invoicing	Len Habel - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20-EE
	Project Location = HELSTF Const. Landfill
	Project Number = 20-EE
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
26803	HLSF-3839-HMW-133-0204	Normal	water	2004-02-04	14:35	24
26804	HLSF-3839-TB-196	Normal	water	2004-02-04	14:35	2

Sample	Test	Method	Prep	Priority	Due Date
26803	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ag, Total	S 6010B	S 3010A	Normal	2004-01-10
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Al, Total	S 6010B	S 3010A	Normal	2004-01-10
	Alkalinity	SM 2320B	N/A	Normal	2004-01-10
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-01-10
	Ammonium Perchlorate	Outside Testing	N/A	Normal	2004-01-10
	As, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	As, Total	S 6010B	S 3010A	Normal	2004-01-10
	B, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	B, Total	S 6010B	S 3010A	Normal	2004-01-10
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ba, Total	S 6010B	S 3010A	Normal	2004-01-10
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Be, Total	S 6010B	S 3010A	Normal	2004-01-10
	Bromide (IC)	E 300.0	N/A	Normal	2004-01-10
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cd, Total	S 6010B	S 3010A	Normal	2004-01-10
	Chloride (IC)	E 300.0	N/A	Normal	2004-01-10
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-01-10
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Co, Total	S 6010B	S 3010A	Normal	2004-01-10
	Conductivity	SM 2510B	N/A	Normal	2004-01-10
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cr, Total	S 6010B	S 3010A	Normal	2004-01-10
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Cu, Total	S 6010B	S 3010A	Normal	2004-01-10
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-01-10
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Fe, Total	S 6010B	S 3010A	Normal	2004-01-10
	Fluoride (IC)	E 300.0	N/A	Normal	2004-01-10
	Herbicides	Outside Testing	N/A	Normal	2004-01-10
	Hg, Total	S 7470A	N/A	Normal	2004-01-10
	K, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mn, Total	S 6010B	S 3010A	Normal	2004-01-10

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Mo, Total	S 6010B	S 3010A	Normal	2004-01-10
	NO2 (IC)	E 300.0	N/A	Normal	2004-01-10
	NO3 (IC)	E 300.0	N/A	Normal	2004-01-10
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Ni, Total	S 6010B	S 3010A	Normal	2004-01-10
	P, Total	S 6010B	S 3010A	Normal	2004-01-10
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Pb, Total	S 6010B	S 3010A	Normal	2004-01-10
	Pesticides	S 8081A	S 3510C	Normal	2004-01-10
	SO4 (IC)	E 300.0	N/A	Normal	2004-01-10
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Se, Total	S 6010B	S 3010A	Normal	2004-01-10
	Semivolatiles	S 8270C	S 3510C	Normal	2004-01-10
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Si, Total	S 6010B	S 3010A	Normal	2004-01-10
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Sn, Total	S 6010B	S 3010A	Normal	2004-01-10
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Sr, Total	S 6010B	S 3010A	Normal	2004-01-10
	TDS	SM 2540C	N/A	Normal	2004-01-10
	TKN	E 351.3	N/A	Normal	2004-01-10
	TOC	E 415.1	N/A	Normal	2004-01-10
	TPH DRO	Mod. 8015B	N/A	Normal	2004-01-10
	TPH GRO	S 8015B	S 5030B	Normal	2004-01-10
	V, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	V, Total	S 6010B	S 3010A	Normal	2004-01-10
	Volatiles	S 8260B	S 5030B	Normal	2004-01-10
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-01-10
	Zn, Total	S 6010B	S 3010A	Normal	2004-01-10
	pH	SM 4500-H+	N/A	Normal	2004-01-10
26804	Volatiles	S 8260B	S 5030B	Normal	2004-01-10

Work Order Receipt

Order

Work Order	4020601
Receive Date	at
Requestor	Len Habel - BAE Systems Analytical Solutions Inc.
Invoicing	Len Habel - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20-EE
	Project Location = HELSTF Const. Landfill
	Project Number = 20-EE
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
26805	HLSF-3839-HMW-032-0204	Normal	water	2004-02-05	10:30	26
26806	HLSF-3839-TB-0204 194	Normal	water	2004-02-05	10:30	2

Sample	Test	Method	Prep	Priority	Due Date
26805	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Ag, Total	S 6010B	S 3010A	Normal	2004-01-14
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Al, Total	S 6010B	S 3010A	Normal	2004-01-14
	Alkalinity	SM 2320B	N/A	Normal	2004-01-14
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-01-14
	Ammonium Perchlorate	Outside Testing	N/A	Normal	2004-01-14
	As, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	As, Total	S 6010B	S 3010A	Normal	2004-01-14
	B, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	B, Total	S 6010B	S 3010A	Normal	2004-01-14
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Ba, Total	S 6010B	S 3010A	Normal	2004-01-14
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Be, Total	S 6010B	S 3010A	Normal	2004-01-14
	Bromide (IC)	E 300.0	N/A	Normal	2004-01-14
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Cd, Total	S 6010B	S 3010A	Normal	2004-01-14
	Chloride (IC)	E 300.0	N/A	Normal	2004-01-14
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-01-14
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Co, Total	S 6010B	S 3010A	Normal	2004-01-14
	Conductivity	SM 2510B	N/A	Normal	2004-01-14
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Cr, Total	S 6010B	S 3010A	Normal	2004-01-14
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Cu, Total	S 6010B	S 3010A	Normal	2004-01-14
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-01-14
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Fe, Total	S 6010B	S 3010A	Normal	2004-01-14
	Fluoride (IC)	E 300.0	N/A	Normal	2004-01-14
	Herbicides	Outside Testing	N/A	Normal	2004-01-14
	Hg, Total	S 7470A	N/A	Normal	2004-01-14
	K, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Mn, Total	S 6010B	S 3010A	Normal	2004-01-14

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Mo, Total	S 6010B	S 3010A	Normal	2004-01-14
	NO2 (IC)	E 300.0	N/A	Normal	2004-01-14
	NO3 (IC)	E 300.0	N/A	Normal	2004-01-14
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Ni, Total	S 6010B	S 3010A	Normal	2004-01-14
	P, Total	S 6010B	S 3010A	Normal	2004-01-14
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Pb, Total	S 6010B	S 3010A	Normal	2004-01-14
	Pesticides	S 8081A	S 3510C	Normal	2004-01-14
	SO4 (IC)	E 300.0	N/A	Normal	2004-01-14
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Se, Total	S 6010B	S 3010A	Normal	2004-01-14
	Semivolatiles	S 8270C	S 3510C	Normal	2004-01-14
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Si, Total	S 6010B	S 3010A	Normal	2004-01-14
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Sn, Total	S 6010B	S 3010A	Normal	2004-01-14
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Sr, Total	S 6010B	S 3010A	Normal	2004-01-14
	TDS	SM 2540C	N/A	Normal	2004-01-14
	TKN	E 351.3	N/A	Normal	2004-01-14
	TOC	E 415.1	N/A	Normal	2004-01-14
	TPH DRO	Mod. 8015B	N/A	Normal	2004-01-14
	TPH GRO	S 8015B	S 5030B	Normal	2004-01-14
	V, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	V, Total	S 6010B	S 3010A	Normal	2004-01-14
	Volatiles	S 8260B	S 5030B	Normal	2004-01-14
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Zn, Total	S 6010B	S 3010A	Normal	2004-01-14
	pH	SM 4500-H+	N/A	Normal	2004-01-14
26806	Volatiles	S 8260B	S 5030B	Normal	2004-02-06 08:51:20.404122-06

Work Order Receipt

Order

Work Order	4020602
Receive Date	at
Requestor	Len Habel - BAE Systems Analytical Solutions Inc.
Invoicing	Len Habel - BAE Systems Analytical Solutions Inc.
Purchase Order	N/A
Project	20-EE
	Project Location = HELSTF Const. Landfill
	Project Number = 20-EE
Comment	N/A

Samples

Sample	Field Code	Priority	Matrix	Collect Date	Collect Time	Quantity
26813	HLSF-3839-HMW-035-0204	Normal	water	2004-02-05	13:30	26
26814	HLSF-3839-TB-0204-198	Normal	water	2004-02-05	13:30	2

Sample	Test	Method	Prep	Priority	Due Date
26813	Ag, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Ag, Total	S 6010B	S 3010A	Normal	2004-01-14
	Al, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Al, Total	S 6010B	S 3010A	Normal	2004-01-14
	Alkalinity	SM 2320B	N/A	Normal	2004-01-14
	Ammonia	SM 4500-NH3 B,C	N/A	Normal	2004-01-14
	Ammonium Perchlorate	Outside Testing	N/A	Normal	2004-01-14
	As, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	As, Total	S 6010B	S 3010A	Normal	2004-01-14
	B, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	B, Total	S 6010B	S 3010A	Normal	2004-01-14
	Ba, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Ba, Total	S 6010B	S 3010A	Normal	2004-01-14
	Be, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Be, Total	S 6010B	S 3010A	Normal	2004-01-14
	Bromide (IC)	E 300.0	N/A	Normal	2004-01-14
	Ca, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Cd, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Cd, Total	S 6010B	S 3010A	Normal	2004-01-14
	Chloride (IC)	E 300.0	N/A	Normal	2004-01-14
	Chromium, Hexavalent	SM 3500-Cr B	N/A	Normal	2004-01-14
	Co, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Co, Total	S 6010B	S 3010A	Normal	2004-01-14
	Conductivity	SM 2510B	N/A	Normal	2004-01-14
	Cr, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Cr, Total	S 6010B	S 3010A	Normal	2004-01-14
	Cu, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Cu, Total	S 6010B	S 3010A	Normal	2004-01-14
	Explosives (8330)	S 8330-C18	S 3535A	Normal	2004-01-14
	Fe, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Fe, Total	S 6010B	S 3010A	Normal	2004-01-14
	Fluoride (IC)	E 300.0	N/A	Normal	2004-01-14
	Herbicides	Outside Testing	N/A	Normal	2004-01-14
	Hg, Total	S 7470A	N/A	Normal	2004-01-14
	K, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Li, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Mg, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Mn, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Mn, Total	S 6010B	S 3010A	Normal	2004-01-14

Work Order Receipt

Sample	Test	Method	Prep	Priority	Due Date
	Mo, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Mo, Total	S 6010B	S 3010A	Normal	2004-01-14
	NO2 (IC)	E 300.0	N/A	Normal	2004-01-14
	NO3 (IC)	E 300.0	N/A	Normal	2004-01-14
	Na, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Ni, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Ni, Total	S 6010B	S 3010A	Normal	2004-01-14
	P, Total	S 6010B	S 3010A	Normal	2004-01-14
	Pb, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Pb, Total	S 6010B	S 3010A	Normal	2004-01-14
	Pesticides	S 8081A	S 3510C	Normal	2004-01-14
	SO4 (IC)	E 300.0	N/A	Normal	2004-01-14
	Se, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Se, Total	S 6010B	S 3010A	Normal	2004-01-14
	Semivolatiles	S 8270C	S 3510C	Normal	2004-01-14
	Si, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Si, Total	S 6010B	S 3010A	Normal	2004-01-14
	Sn, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Sn, Total	S 6010B	S 3010A	Normal	2004-01-14
	Sr, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Sr, Total	S 6010B	S 3010A	Normal	2004-01-14
	TDS	SM 2540C	N/A	Normal	2004-01-14
	TKN	E 351.3	N/A	Normal	2004-01-14
	TOC	E 415.1	N/A	Normal	2004-01-14
	TPH DRO	Mod. 8015B	N/A	Normal	2004-01-14
	TPH GRO	S 8015B	S 5030B	Normal	2004-01-14
	V, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	V, Total	S 6010B	S 3010A	Normal	2004-01-14
	Volatiles	S 8260B	S 5030B	Normal	2004-01-14
	Zn, Dissolved	S 6010B	S 3005A	Normal	2004-01-14
	Zn, Total	S 6010B	S 3010A	Normal	2004-01-14
	pH	SM 4500-H+	N/A	Normal	2004-01-14
26814	Volatiles	S 8260B	S 5030B	Normal	2004-01-14

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7371	Date Analyzed:	2004-02-06	Analyzed By:	JG
Prep Batch:	6607	Date Prepared:	2004-02-06	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		224	mg/L as CaCo3	1	4.00
Total Alkalinity		224	mg/L as CaCo3	1	4.00

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7371	Date Analyzed:	2004-02-06	Analyzed By:	JG
Prep Batch:	6607	Date Prepared:	2004-02-06	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		182	mg/L as CaCo3	1	4.00
Total Alkalinity		182	mg/L as CaCo3	1	4.00

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7371	Date Analyzed:	2004-02-06	Analyzed By:	JG
Prep Batch:	6607	Date Prepared:	2004-02-06	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		218	mg/L as CaCo3	1	4.00
Total Alkalinity		218	mg/L as CaCo3	1	4.00

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7371	Date Analyzed:	2004-02-06	Analyzed By:	JG
Prep Batch:	6607	Date Prepared:	2004-02-06	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00

continued . . .

sample 26803 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bicarbonate Alkalinity		182	mg/L as CaCo3	1	4.00
Total Alkalinity		182	mg/L as CaCo3	1	4.00

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7801	Date Analyzed:	2004-02-13	Analyzed By:	MK
Prep Batch:	6970	Date Prepared:	2004-02-13	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		176	mg/L as CaCo3	1	4.00
Total Alkalinity		176	mg/L as CaCo3	1	4.00

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	7801	Date Analyzed:	2004-02-13	Analyzed By:	MK
Prep Batch:	6970	Date Prepared:	2004-02-13	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		170	mg/L as CaCo3	1	4.00
Total Alkalinity		170	mg/L as CaCo3	1	4.00

Method Blank (1) QC Batch: 7371

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 7801

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Duplicate (1) QC Batch: 7371

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Bicarbonate Alkalinity	100	104	mg/L as CaCo3	1	4	11
Total Alkalinity	100	104	mg/L as CaCo3	1	4	11

Duplicate (1) QC Batch: 7801

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	11
Bicarbonate Alkalinity	172	170	mg/L as CaCo3	1	1	11
Total Alkalinity	172	170	mg/L as CaCo3	1	1	11

Standard (ICV-1) QC Batch: 7371

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	262	105	90 - 105	2004-02-06

Standard (CCV-1) QC Batch: 7371

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	248	99	90 - 105	2004-02-06

Standard (ICV-1) QC Batch: 7801

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 105	2004-02-13

Standard (CCV-1) QC Batch: 7801

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 105	2004-02-13

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7353	Date Analyzed:	2004-02-06	Analyzed By:	MW
Prep Batch:	6587	Date Prepared:	2004-02-06	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7353	Date Analyzed:	2004-02-06	Analyzed By:	MW
Prep Batch:	6587	Date Prepared:	2004-02-06	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7353	Date Analyzed:	2004-02-06	Analyzed By:	MW
Prep Batch:	6587	Date Prepared:	2004-02-06	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7353	Date Analyzed:	2004-02-06	Analyzed By:	MW
Prep Batch:	6587	Date Prepared:	2004-02-06	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7546	Date Analyzed:	2004-02-12	Analyzed By:	MW
Prep Batch:	6755	Date Prepared:	2004-02-12	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	7546	Date Analyzed:	2004-02-12	Analyzed By:	MW
Prep Batch:	6755	Date Prepared:	2004-02-12	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Method Blank (1) QC Batch: 7353

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Method Blank (1) QC Batch: 7546

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 7353

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.82	4.48	mg/L	1	5.00	<0.318	96	7	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7546

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.48	4.65	mg/L	1	5.00	<0.318	90	4	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7353

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	11.4	11.7	mg/L	1	5.00	6.66	95	2	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7546

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.93	4.65	mg/L	1	5.00	<0.318	99	6	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7353

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.54	91	85 - 115	2004-02-06

Standard (CCV-1) QC Batch: 7353

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.48	90	85 - 115	2004-02-06

Standard (ICV-1) QC Batch: 7546

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.98	100	85 - 115	2004-02-12

Standard (CCV-1) QC Batch: 7546

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.65	93	85 - 115	2004-02-12

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7368	Date Analyzed:	2004-02-05	Analyzed By:	MK
Prep Batch:	6602	Date Prepared:	2004-02-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		13200	μMHOS/cm	1	0.00

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7368	Date Analyzed:	2004-02-05	Analyzed By:	MK
Prep Batch:	6602	Date Prepared:	2004-02-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		29300	μMHOS/cm	1	0.00

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7368	Date Analyzed:	2004-02-05	Analyzed By:	MK
Prep Batch:	6602	Date Prepared:	2004-02-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		12400	μMHOS/cm	1	0.00

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7368	Date Analyzed:	2004-02-05	Analyzed By:	MK
Prep Batch:	6602	Date Prepared:	2004-02-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		29600	μMHOS/cm	1	0.00

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7644	Date Analyzed:	2004-02-06	Analyzed By:	MK
Prep Batch:	6837	Date Prepared:	2004-02-06	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		13400	μMHOS/cm	1	0.00

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	7644	Date Analyzed:	2004-02-06	Analyzed By:	MK
Prep Batch:	6837	Date Prepared:	2004-02-06	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		11400	μMHOS/cm	1	0.00

Method Blank (1) QC Batch: 7368

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Method Blank (1) QC Batch: 7644

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Duplicate (1) QC Batch: 7368

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	12400	12400	μMHOS/cm	1	0	8

Duplicate (1) QC Batch: 7644

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	11400	11400	μMHOS/cm	1	0	8

Standard (ICV-1) QC Batch: 7368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1420	101	90 - 110	2004-02-05

Standard (CCV-1) QC Batch: 7368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1420	101	90 - 110	2004-02-05

Standard (ICV-1) QC Batch: 7644

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1420	101	90 - 110	2004-02-06

Standard (CCV-1) QC Batch: 7644

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1430	101	90 - 110	2004-02-06

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7370	Date Analyzed:	2004-02-05	Analyzed By:	JR
Prep Batch:	6604	Date Prepared:	2004-02-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0150	mg/L	1	0.0100

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7370	Date Analyzed:	2004-02-05	Analyzed By:	JR
Prep Batch:	6604	Date Prepared:	2004-02-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		1.47	mg/L	10	0.0100

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7370	Date Analyzed:	2004-02-05	Analyzed By:	JR
Prep Batch:	6604	Date Prepared:	2004-02-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		0.0460	mg/L	1	0.0100

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7370	Date Analyzed:	2004-02-05	Analyzed By:	JR
Prep Batch:	6604	Date Prepared:	2004-02-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		1.41	mg/L	10	0.0100

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7502	Date Analyzed:	2004-02-06	Analyzed By:	JR
Prep Batch:	6715	Date Prepared:	2004-02-06	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	7502	Date Analyzed:	2004-02-06	Analyzed By:	JR
Prep Batch:	6715	Date Prepared:	2004-02-06	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Method Blank (1) QC Batch: 7370

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 7502

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Laboratory Control Spike (LCS-1) QC Batch: 7370

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.487	0.487	mg/L	1	0.500	<0.00500	97	0	88 - 117	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7502

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.489	0.500	mg/L	1	0.500	<0.00500	98	2	88 - 117	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7370

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.600	0.595	mg/L	1.11	0.500	0.046	100	1	52 - 161	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7502

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.542	0.539	mg/L	1.11	0.500	<0.00555	98	0	52 - 161	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7370

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.520	104	80 - 120	2004-02-05

Standard (CCV-1) QC Batch: 7370

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.486	97	80 - 120	2004-02-05

Standard (ICV-1) QC Batch: 7502

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.520	104	80 - 120	2004-02-06

Standard (CCV-1) QC Batch: 7502

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.506	101	80 - 120	2004-02-06

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR
Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP
QC Batch:	7589	Date Analyzed:	2004-02-13	Analyzed By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		430	mg/L	1	0.500
Dissolved Magnesium		564	mg/L	1	0.500
Dissolved Potassium		81.0	mg/L	1	0.500
Dissolved Sodium		1920	mg/L	1	0.500
Dissolved Lithium		0.597	mg/L	1	0.00500

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR
Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP
QC Batch:	7589	Date Analyzed:	2004-02-13	Analyzed By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		424	mg/L	1	0.500
Dissolved Magnesium		1710	mg/L	1	0.500
Dissolved Potassium		227	mg/L	1	0.500
Dissolved Sodium		4560	mg/L	1	0.500
Dissolved Lithium		1.06	mg/L	1	0.00500

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR
Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP
QC Batch:	7589	Date Analyzed:	2004-02-13	Analyzed By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		395	mg/L	1	0.500
Dissolved Magnesium		461	mg/L	1	0.500
Dissolved Potassium		76.6	mg/L	1	0.500
Dissolved Sodium		1940	mg/L	1	0.500
Dissolved Lithium		0.566	mg/L	1	0.00500

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR

Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP
QC Batch:	7589	Date Analyzed:	2004-02-13	Analyzed By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		415	mg/L	1	0.500
Dissolved Magnesium		1680	mg/L	1	0.500
Dissolved Potassium		226	mg/L	1	0.500
Dissolved Sodium		4450	mg/L	1	0.500
Dissolved Lithium		1.04	mg/L	1	0.00500

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR
Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP
QC Batch:	7589	Date Analyzed:	2004-02-13	Analyzed By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		411	mg/L	1	0.500
Dissolved Magnesium		467	mg/L	1	0.500
Dissolved Potassium		75.1	mg/L	1	0.500
Dissolved Sodium		2120	mg/L	1	0.500
Dissolved Lithium		0.652	mg/L	1	0.00500

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR
Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP
QC Batch:	7589	Date Analyzed:	2004-02-13	Analyzed By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		426	mg/L	1	0.500
Dissolved Magnesium		427	mg/L	1	0.500
Dissolved Potassium		64.9	mg/L	1	0.500
Dissolved Sodium		1720	mg/L	1	0.500
Dissolved Lithium		0.468	mg/L	1	0.00500

Method Blank (1) QC Batch: 7450

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 7589

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5
Dissolved Potassium		<0.500	mg/L	0.5
Dissolved Sodium		<0.500	mg/L	0.5

Laboratory Control Spike (LCS-1) QC Batch: 7450

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0460	0.0470	mg/L	1	0.0500	<0.00197	92	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7589

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	94.9	93.7	mg/L	1	100	<0.102	95	1	88.4 - 107	20
Dissolved Magnesium	94.1	93.2	mg/L	1	100	<0.110	94	1	85 - 112	20
Dissolved Potassium	98.9	101	mg/L	1	100	<0.101	99	2	88 - 113	20
Dissolved Sodium	97.5	101	mg/L	1	100	<0.120	98	4	90.9 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7450

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.508	0.508	mg/L	1	0.0500	0.468	80	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7589

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	532	505	mg/L	1	100	426	106	5	75 - 125	20
Dissolved Magnesium	538	512	mg/L	1	100	427	111	5	75 - 125	20
Dissolved Potassium	173	166	mg/L	1	100	64.9	108	4	75 - 125	20
Dissolved Sodium [1]	1890	1830	mg/L	1	100	1720	170	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7450

[1] ms recovery out of limits due to matrix effect, use lcs/lcsd

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.998	100	90 - 110	2004-02-10

Standard (CCV-1) QC Batch: 7450

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.04	104	90 - 110	2004-02-10

Standard (ICV-1) QC Batch: 7589

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.4	102	90 - 110	2004-02-13
Dissolved Magnesium		mg/L	25.0	24.9	100	90 - 110	2004-02-13
Dissolved Potassium		mg/L	25.0	25.6	102	90 - 110	2004-02-13
Dissolved Sodium		mg/L	25.0	25.4	102	90 - 110	2004-02-13

Standard (CCV-1) QC Batch: 7589

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.1	100	90 - 110	2004-02-13
Dissolved Magnesium		mg/L	25.0	23.8	95	90 - 110	2004-02-13
Dissolved Potassium		mg/L	25.0	25.1	100	90 - 110	2004-02-13
Dissolved Sodium		mg/L	25.0	24.6	98	90 - 110	2004-02-13

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR
Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		1.33	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.0650	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		9.44	mg/L	1	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		48.0	mg/L	1	0.0500

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR
Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		7.00	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		1.08	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.891	mg/L	1	0.0500

continued . . .

sample 26799 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		7.41	mg/L	1	0.00500
Dissolved Vanadium		0.0400	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		23.4	mg/L	1	0.0500

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR
Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		1.63	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.165	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		7.53	mg/L	1	0.00500
Dissolved Vanadium		0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		36.6	mg/L	1	0.0500

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR
Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130

continued . . .

sample 26803 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		7.16	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		1.04	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.896	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		7.57	mg/L	1	0.00500
Dissolved Vanadium		0.0380	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		18.9	mg/L	1	0.0500

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR
Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		1.81	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.151	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		7.04	mg/L	1	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250

continued . . .

sample 26805 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silica		22.9	mg/L	1	0.0500

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	7450	Date Analyzed:	2004-02-10	Analyzed By:	RR
Prep Batch:	6643	Date Prepared:	2004-02-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		1.08	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.0250	mg/L	1	0.0250
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.229	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		8.61	mg/L	1	0.00500
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		48.7	mg/L	1	0.0500

Method Blank (1) QC Batch: 7450

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.0130	mg/L	0.013
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.0100	mg/L	0.01
Dissolved Boron		<0.0500	mg/L	0.05
Dissolved Barium		<0.100	mg/L	0.1
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.0250	mg/L	0.025
Dissolved Cobalt		<0.0250	mg/L	0.025
Dissolved Chromium		<0.0100	mg/L	0.01
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.0250	mg/L	0.025
Dissolved Lead		<0.0100	mg/L	0.01
Dissolved Selenium		<0.0500	mg/L	0.05
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.0250	mg/L	0.025
Dissolved Zinc		<0.0250	mg/L	0.025
Dissolved Silica		<0.0500	mg/L	0.05

Laboratory Control Spike (LCS-1) QC Batch: 7450

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver		0.124	0.124	mg/L	1	0.125	<0.000199	99	0	85 - 115	20
Dissolved Aluminum		0.939	0.942	mg/L	1	1.00	<0.00984	94	0	85 - 115	20
Dissolved Arsenic		0.450	0.457	mg/L	1	0.500	<0.00860	90	2	85 - 115	20
Dissolved Boron		0.0510	0.0430	mg/L	1	0.0500	<0.00366	102	17	85 - 115	20
Dissolved Barium		1.01	1.02	mg/L	1	1.00	<0.000984	101	1	85 - 115	20
Dissolved Beryllium		0.0230	0.0240	mg/L	1	0.0250	<0.000532	92	4	85 - 115	20
Dissolved Cadmium		0.242	0.243	mg/L	1	0.250	<0.000577	97	0	85 - 115	20
Dissolved Cobalt		0.252	0.254	mg/L	1	0.250	<0.000630	101	1	85 - 115	20
Dissolved Chromium		0.107	0.108	mg/L	1	0.100	<0.000437	107	1	85 - 115	20
Dissolved Copper		0.127	0.127	mg/L	1	0.125	<0.00164	102	0	85 - 115	20
Dissolved Iron		0.499	0.495	mg/L	1	0.500	<0.00281	100	1	85 - 115	20
Dissolved Manganese		0.251	0.252	mg/L	1	0.250	<0.00296	100	0	85 - 115	20
Dissolved Molybdenum		0.520	0.524	mg/L	1	0.500	<0.00118	104	1	85 - 115	20
Dissolved Nickel		0.242	0.243	mg/L	1	0.250	<0.00126	97	0	85 - 115	20
Dissolved Lead		0.498	0.500	mg/L	1	0.500	<0.00310	100	0	85 - 115	20
Dissolved Selenium		0.434	0.435	mg/L	1	0.500	<0.00370	87	0	85 - 115	20
Dissolved Tin		0.301	0.302	mg/L	1	0.300	<0.00238	100	0	85 - 115	20
Dissolved Strontium		0.0500	0.0500	mg/L	1	0.0500	<0.000457	100	0	85 - 115	20
Dissolved Vanadium		0.260	0.261	mg/L	1	0.250	<0.000651	104	0	85 - 115	20
Dissolved Zinc		0.240	0.240	mg/L	1	0.250	<0.00151	96	0	85 - 115	20
Dissolved Silica	[1,2]	1.06	1.05	mg/L	1	1.00	<0.00632	106	1	85 - 115	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7450

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.138	0.127	mg/L	1	0.125	<0.000199	110	8	75 - 125	20
Dissolved Aluminum	1.26	1.17	mg/L	1	1.00	0.014	125	7	75 - 125	20
Dissolved Arsenic	0.470	0.468	mg/L	1	0.500	<0.00860	94	0	75 - 125	20

continued . . .

[1]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[2]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Boron		1.12	1.14	mg/L	1	0.0500	1.08	80	2	75 - 125	20
Dissolved Barium		1.11	1.09	mg/L	1	1.00	0.009	110	2	75 - 125	20
Dissolved Beryllium		0.0220	0.0220	mg/L	1	0.0250	<0.000532	88	0	75 - 125	20
Dissolved Cadmium		0.244	0.239	mg/L	1	0.250	<0.000577	98	2	75 - 125	20
Dissolved Cobalt		0.247	0.244	mg/L	1	0.250	<0.000630	99	1	75 - 125	20
Dissolved Chromium		0.0880	0.107	mg/L	1	0.100	<0.000437	88	19	75 - 125	20
Dissolved Copper		0.133	0.133	mg/L	1	0.125	<0.00164	106	0	75 - 125	20
Dissolved Iron		0.501	0.511	mg/L	1	0.500	0.01	98	2	75 - 125	20
Dissolved Manganese		0.235	0.230	mg/L	1	0.250	<0.00296	94	2	75 - 125	20
Dissolved Molybdenum	[3][4]	0.711	0.821	mg/L	1	0.500	0.229	96	14	75 - 125	20
Dissolved Nickel		0.266	0.263	mg/L	1	0.250	<0.00126	106	1	75 - 125	20
Dissolved Lead		0.477	0.470	mg/L	1	0.500	<0.00310	95	1	75 - 125	20
Dissolved Selenium		0.487	0.493	mg/L	1	0.500	<0.00370	97	1	75 - 125	20
Dissolved Tin		0.254	0.255	mg/L	1	0.300	<0.00238	85	0	75 - 125	20
Dissolved Strontium		8.65	8.66	mg/L	1	0.0500	8.61	80	0	75 - 125	20
Dissolved Vanadium		0.264	0.264	mg/L	1	0.250	0.024	96	0	75 - 125	20
Dissolved Zinc		0.244	0.237	mg/L	1	0.250	0.003	96	3	75 - 125	20
Dissolved Silica		49.2	49.2	mg/L	1	0.500	48.7	100	0	75 - 125	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7450

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.124	99	90 - 110	2004-02-10
Dissolved Aluminum		mg/L	1.00	0.982	98	90 - 110	2004-02-10
Dissolved Arsenic		mg/L	1.00	0.988	99	90 - 110	2004-02-10
Dissolved Boron		mg/L	1.00	1.01	101	90 - 110	2004-02-10
Dissolved Barium		mg/L	1.00	0.995	100	90 - 110	2004-02-10
Dissolved Beryllium		mg/L	1.00	0.986	99	90 - 110	2004-02-10
Dissolved Cadmium		mg/L	1.00	0.996	100	90 - 110	2004-02-10
Dissolved Cobalt		mg/L	1.00	0.995	100	90 - 110	2004-02-10
Dissolved Chromium		mg/L	1.00	0.994	99	90 - 110	2004-02-10
Dissolved Copper		mg/L	1.00	0.992	99	90 - 110	2004-02-10
Dissolved Iron		mg/L	1.00	0.993	99	90 - 110	2004-02-10
Dissolved Manganese		mg/L	1.00	0.997	100	90 - 110	2004-02-10
Dissolved Molybdenum		mg/L	1.00	0.987	99	90 - 110	2004-02-10
Dissolved Nickel		mg/L	1.00	0.994	99	90 - 110	2004-02-10
Dissolved Lead		mg/L	1.00	0.992	99	90 - 110	2004-02-10
Dissolved Selenium		mg/L	1.00	0.991	99	90 - 110	2004-02-10
Dissolved Tin		mg/L	1.00	0.988	99	90 - 110	2004-02-10
Dissolved Strontium		mg/L	1.00	1.00	100	90 - 110	2004-02-10
Dissolved Vanadium		mg/L	1.00	0.991	99	90 - 110	2004-02-10
Dissolved Zinc		mg/L	1.00	0.996	100	90 - 110	2004-02-10
Dissolved Silica		mg/L	5.00	4.96	99	95 - 105	2004-02-10

Standard (CCV-1) QC Batch: 7450

[3]Changed spike amount from 50 to 0.5 due to concentration in spiking solution.
[4]Changed spike amount from 50 to 0.5 due to concentration in spiking solution.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.118	94	90 - 110	2004-02-10
Dissolved Aluminum		mg/L	1.00	0.923	92	90 - 110	2004-02-10
Dissolved Arsenic		mg/L	1.00	0.958	96	90 - 110	2004-02-10
Dissolved Boron		mg/L	1.00	0.932	93	90 - 110	2004-02-10
Dissolved Barium		mg/L	1.00	0.958	96	90 - 110	2004-02-10
Dissolved Beryllium		mg/L	1.00	0.952	95	90 - 110	2004-02-10
Dissolved Cadmium		mg/L	1.00	0.960	96	90 - 110	2004-02-10
Dissolved Cobalt		mg/L	1.00	0.961	96	90 - 110	2004-02-10
Dissolved Chromium		mg/L	1.00	0.954	95	90 - 110	2004-02-10
Dissolved Copper		mg/L	1.00	0.942	94	90 - 110	2004-02-10
Dissolved Iron		mg/L	1.00	0.958	96	90 - 110	2004-02-10
Dissolved Manganese		mg/L	1.00	0.960	96	90 - 110	2004-02-10
Dissolved Molybdenum		mg/L	1.00	0.947	95	90 - 110	2004-02-10
Dissolved Nickel		mg/L	1.00	0.955	96	90 - 110	2004-02-10
Dissolved Lead		mg/L	1.00	0.956	96	90 - 110	2004-02-10
Dissolved Selenium		mg/L	1.00	0.957	96	90 - 110	2004-02-10
Dissolved Tin		mg/L	1.00	0.957	96	90 - 110	2004-02-10
Dissolved Strontium		mg/L	1.00	0.967	97	90 - 110	2004-02-10
Dissolved Vanadium		mg/L	1.00	0.945	94	90 - 110	2004-02-10
Dissolved Zinc		mg/L	1.00	0.970	97	90 - 110	2004-02-10
Dissolved Silica		mg/L	5.00	4.80	96	90 - 110	2004-02-10

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7535	Date Analyzed:	2004-02-12	Analyzed By:	JH
Prep Batch:	6631	Date Prepared:	2004-02-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.33	μg/L	1	2.50	53	35.8 - 121

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7535	Date Analyzed:	2004-02-12	Analyzed By:	JH
Prep Batch:	6631	Date Prepared:	2004-02-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.08	μg/L	1	2.50	43	35.8 - 121

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7535	Date Analyzed:	2004-02-12	Analyzed By:	JH
Prep Batch:	6631	Date Prepared:	2004-02-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.11	μg/L	1	2.50	84	35.8 - 121

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7535	Date Analyzed:	2004-02-12	Analyzed By:	JH
Prep Batch:	6631	Date Prepared:	2004-02-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		0.973	μg/L	1	2.50	39	35.8 - 121

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7535	Date Analyzed:	2004-02-12	Analyzed By:	JH
Prep Batch:	6631	Date Prepared:	2004-02-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		0.981	μg/L	1	2.50	39	35.8 - 121

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	7535	Date Analyzed:	2004-02-12	Analyzed By:	JH
Prep Batch:	6631	Date Prepared:	2004-02-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.15	μg/L	1	2.50	46	35.8 - 121

Method Blank (1) QC Batch: 7535

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.47	μg/L	1	2.50	59	35.8 - 121

Laboratory Control Spike (LCS-1) QC Batch: 7535

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.10	2.19	μg/L	1	2.50	<0.196	84	4	52.3 - 129	20
RDX	2.82	2.89	μg/L	1	2.50	<0.364	113	2	65.7 - 117	20
1,3,5-Trinitrobenzene	2.41	2.50	μg/L	1	2.50	<0.114	96	4	30.3 - 141	20
1,3-Dinitrobenzene	2.13	2.30	μg/L	1	2.50	<0.108	85	8	45.9 - 139	20
Tetryl	2.66	2.78	μg/L	1	2.50	<0.200	106	4	49 - 129	20
Nitrobenzene	2.64	2.96	μg/L	1	2.50	<0.0990	106	11	0 - 133	20
TNT	1.77	1.75	μg/L	1	2.50	<0.116	71	1	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.13	2.18	μg/L	1	2.50	<0.146	85	2	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.46	2.70	μg/L	1	2.50	<0.183	98	9	44.8 - 130	20
2-NT	1.97	2.10	μg/L	1	2.50	<0.139	79	6	44.9 - 128	20
4-NT	2.33	2.40	μg/L	1	2.50	<0.0851	93	3	47.8 - 123	20
3-NT	2.12	2.13	μg/L	1	2.50	<0.176	85	0	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.34	2.37	μg/L	1	2.50	94	95	42 - 125

Standard (ICV-1) QC Batch: 7535

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		μg/L	500	489	98	85 - 115	2004-02-12
RDX		μg/L	500	554	111	85 - 115	2004-02-12
1,3,5-Trinitrobenzene		μg/L	500	451	90	85 - 115	2004-02-12
1,3-Dinitrobenzene		μg/L	500	478	96	85 - 115	2004-02-12
Tetryl		μg/L	500	571	114	85 - 115	2004-02-12
Nitrobenzene		μg/L	500	572	114	85 - 115	2004-02-12
TNT		μg/L	500	470	94	85 - 115	2004-02-12
4-amino-DNT / 2-amino-DNT		μg/L	500	488	98	85 - 115	2004-02-12

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
2,6-DNT / 2,4-DNT		μg/L	500	546	109	85 - 115	2004-02-12
2-NT		μg/L	500	436	87	85 - 115	2004-02-12
4-NT		μg/L	500	527	105	85 - 115	2004-02-12
3-NT		μg/L	500	566	113	85 - 115	2004-02-12

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.24	μg/L	1	2.50	90	85 - 115

Standard (CCV-1) QC Batch: 7535

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		μg/L	500	435	87	85 - 115	2004-02-12
RDX		μg/L	500	573	115	85 - 115	2004-02-12
1,3,5-Trinitrobenzene		μg/L	500	473	95	85 - 115	2004-02-12
1,3-Dinitrobenzene		μg/L	500	427	85	85 - 115	2004-02-12
Tetryl		μg/L	500	510	102	85 - 115	2004-02-12
Nitrobenzene		μg/L	500	536	107	85 - 115	2004-02-12
TNT		μg/L	500	442	88	85 - 115	2004-02-12
4-amino-DNT / 2-amino-DNT		μg/L	500	472	94	85 - 115	2004-02-12
2,6-DNT / 2,4-DNT		μg/L	500	573	115	85 - 115	2004-02-12
2-NT		μg/L	500	552	110	85 - 115	2004-02-12
4-NT		μg/L	500	539	108	85 - 115	2004-02-12
3-NT		μg/L	500	551	110	85 - 115	2004-02-12

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.28	μg/L	1	2.50	91	85 - 115

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7513	Date Analyzed:	2004-02-11	Analyzed By:	BC
Prep Batch:	6724	Date Prepared:	2004-02-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7513	Date Analyzed:	2004-02-11	Analyzed By:	BC
Prep Batch:	6724	Date Prepared:	2004-02-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7513	Date Analyzed:	2004-02-11	Analyzed By:	BC
Prep Batch:	6724	Date Prepared:	2004-02-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7513	Date Analyzed:	2004-02-11	Analyzed By:	BC
Prep Batch:	6724	Date Prepared:	2004-02-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7513	Date Analyzed:	2004-02-11	Analyzed By:	BC
Prep Batch:	6724	Date Prepared:	2004-02-10	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	7638	Date Analyzed:	2004-02-18	Analyzed By:	BC
Prep Batch:	6834	Date Prepared:	2004-02-17	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Method Blank (1) QC Batch: 7513

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Method Blank (1) QC Batch: 7638

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Laboratory Control Spike (LCS-1) QC Batch: 7513

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00111	0.00111	mg/L	1	0.00100	<0.0000360	111	0	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7638

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00101	0.00101	mg/L	1	0.00100	<0.0000360	101	0	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7513

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00111	0.00111	mg/L	1	0.00100	<0.0000360	111	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7638

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00106	0.00108	mg/L	1	0.00100	<0.0000360	106	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7513

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00103	103	80 - 120	2004-02-11

Standard (CCV-1) QC Batch: 7513

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00109	109	80 - 120	2004-02-11

Standard (ICV-1) QC Batch: 7638

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00101	101	80 - 120	2004-02-18

Standard (CCV-1) QC Batch: 7638

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.000950	95	80 - 120	2004-02-18

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7534	Date Analyzed:	2004-02-05	Analyzed By:	JR
Prep Batch:	6740	Date Prepared:	2004-02-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.720	mg/L	1	0.200
Chloride		1240	mg/L	100	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		35.7	mg/L	10	0.100
Sulfate		6800	mg/L	500	1.00

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7534	Date Analyzed:	2004-02-05	Analyzed By:	JR
Prep Batch:	6740	Date Prepared:	2004-02-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		3.72	mg/L	5	0.200
Chloride		5890	mg/L	500	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		146	mg/L	50	0.100
Sulfate		14000	mg/L	1000	1.00

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7534	Date Analyzed:	2004-02-05	Analyzed By:	JR
Prep Batch:	6740	Date Prepared:	2004-02-05	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		810	mg/L	100	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		14.3	mg/L	10	0.100
Sulfate		6990	mg/L	500	1.00

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	7534	Date Analyzed:	2004-02-05	Analyzed By:	JR

Prep Batch: 6740 Date Prepared: 2004-02-05 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		3.64	mg/L	5	0.200
Chloride		5980	mg/L	500	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		152	mg/L	100	0.100
Sulfate		14000	mg/L	1000	1.00

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis: Ion Chromatography Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 7560 Date Analyzed: 2004-02-06 Analyzed By: JR
Prep Batch: 6769 Date Prepared: 2004-02-06 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		1160	mg/L	100	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		27.9	mg/L	10	0.100
Sulfate		6660	mg/L	500	1.00

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis: Ion Chromatography Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 7560 Date Analyzed: 2004-02-06 Analyzed By: JR
Prep Batch: 6769 Date Prepared: 2004-02-06 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		892	mg/L	100	2.00
Fluoride		0.870	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		30.4	mg/L	50	0.100
Sulfate		5740	mg/L	500	1.00

Method Blank (1) QC Batch: 7534

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 7560

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 7534

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.47	2.51	mg/L	1	2.50	<0.0800	99	2	88 - 106	4
Chloride	12.0	12.1	mg/L	1	12.5	<0.310	96	1	79 - 112	3
Fluoride	2.46	2.47	mg/L	1	2.50	<0.0400	98	0	82 - 109	2
Nitrite-N	2.46	2.46	mg/L	1	2.50	<0.0100	98	0	83 - 113	2
Nitrate-N	2.48	2.47	mg/L	1	2.50	<0.0100	99	0	86 - 111	1.4
Sulfate	12.6	12.6	mg/L	1	12.5	<0.160	101	0	89 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7560

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.48	2.51	mg/L	1	2.50	<0.0800	99	1	88 - 106	4
Chloride	11.9	12.1	mg/L	1	12.5	<0.310	95	2	79 - 112	3
Fluoride	2.43	2.49	mg/L	1	2.50	<0.0400	97	2	82 - 109	2
Nitrite-N	2.45	2.47	mg/L	1	2.50	<0.0100	98	1	83 - 113	2
Nitrate-N	2.45	2.50	mg/L	1	2.50	<0.0100	98	2	86 - 111	1.4
Sulfate	12.4	12.6	mg/L	1	12.5	<0.160	99	2	89 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7534

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1240	1240	mg/L	500	2.50	<40.0	99	0	84 - 121	3

continued . . .

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride		12300	12100	mg/L	500	12.5	5980	101	2	79 - 111	3
Fluoride		1240	1230	mg/L	500	2.50	<20.0	99	1	93 - 104	2
Nitrite-N		1230	1230	mg/L	500	2.50	<5.00	98	0	85 - 111	2
Nitrate-N		1370	1370	mg/L	500	2.50	247	90	0	77 - 119	2
Sulfate	[1][2]	22700	20400	mg/L	500	12.5	14600	130	11	80 - 110	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7560

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1240	1240	mg/L	500	2.50	<40.0	99	0	84 - 121	3
Chloride	6860	6840	mg/L	500	12.5	1250	90	0	79 - 111	3
Fluoride	1220	1210	mg/L	500	2.50	<20.0	98	1	93 - 104	2
Nitrite-N	1220	1220	mg/L	500	2.50	<5.00	98	0	85 - 111	2
Nitrate-N	1250	1250	mg/L	500	2.50	<5.00	100	0	77 - 119	2
Sulfate	11700	11700	mg/L	500	12.5	5740	95	0	80 - 110	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7534

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.39	96	90 - 110	2004-02-05
Chloride		mg/L	12.5	11.7	94	90 - 110	2004-02-05
Fluoride		mg/L	2.50	2.40	96	90 - 110	2004-02-05
Nitrite-N		mg/L	2.50	2.38	95	90 - 110	2004-02-05
Nitrate-N		mg/L	2.50	2.30	92	90 - 110	2004-02-05
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-02-05

Standard (CCV-1) QC Batch: 7534

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.43	97	90 - 110	2004-02-05
Chloride		mg/L	12.5	12.0	96	85 - 115	2004-02-05
Fluoride		mg/L	2.50	2.49	100	85 - 115	2004-02-05
Nitrite-N		mg/L	2.50	2.45	98	85 - 115	2004-02-05
Nitrate-N		mg/L	2.50	2.35	94	85 - 115	2004-02-05
Sulfate		mg/L	12.5	11.9	95	85 - 115	2004-02-05

Standard (ICV-1) QC Batch: 7560

[1]Percent recovery is high due to matrix interferences which distorted the curve reflecting the higher matrix spike sulfate result. Sulfate results for the LCS and LCSD were in control.

[2]The RPD is high due to matrix interferences which distorted the curve reflecting the higher matrix spike sulfate result. Sulfate results for the LCS and LCSD were in control

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.46	98	90 - 110	2004-02-06
Chloride		mg/L	12.5	11.8	94	90 - 110	2004-02-06
Fluoride		mg/L	2.50	2.43	97	90 - 110	2004-02-06
Nitrite-N		mg/L	2.50	2.42	97	90 - 110	2004-02-06
Nitrate-N		mg/L	2.50	2.35	94	90 - 110	2004-02-06
Sulfate		mg/L	12.5	11.7	94	90 - 110	2004-02-06

Standard (CCV-1) QC Batch: 7560

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.48	99	90 - 110	2004-02-06
Chloride		mg/L	12.5	12.1	97	85 - 115	2004-02-06
Fluoride		mg/L	2.50	2.47	99	85 - 115	2004-02-06
Nitrite-N		mg/L	2.50	2.46	98	85 - 115	2004-02-06
Nitrate-N		mg/L	2.50	2.37	95	85 - 115	2004-02-06
Sulfate		mg/L	12.5	12.0	96	85 - 115	2004-02-06

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3510C
QC Batch:	7493	Date Analyzed:	2004-02-11	Analyzed By:	AG
Prep Batch:	6674	Date Prepared:	2004-02-09	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100
Toxaphene		<0.00500	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000710	mg/L	0.005	0.200	71	60.6 - 114
Deca chlorobiphenyl		0.000910	mg/L	0.005	0.200	91	70.5 - 111

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3510C
QC Batch:	7493	Date Analyzed:	2004-02-11	Analyzed By:	AG
Prep Batch:	6674	Date Prepared:	2004-02-09	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100

continued . . .

sample 26799 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100
Toxaphene		<0.00500	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000610	mg/L	0.005	0.200	61	60.6 - 114
Deca chlorobiphenyl		0.000880	mg/L	0.005	0.200	88	70.5 - 111

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3510C
QC Batch:	7493	Date Analyzed:	2004-02-11	Analyzed By:	AG
Prep Batch:	6674	Date Prepared:	2004-02-09	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100

continued . . .

sample 26801 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Toxaphene		0.0267	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000630	mg/L	0.005	0.200	63	60.6 - 114
Deca chlorobiphenyl		0.000890	mg/L	0.005	0.200	89	70.5 - 111

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3510C
QC Batch:	7493	Date Analyzed:	2004-02-11	Analyzed By:	AG
Prep Batch:	6674	Date Prepared:	2004-02-09	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100
Toxaphene		<0.00500	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000710	mg/L	0.005	0.200	71	60.6 - 114
Deca chlorobiphenyl		0.000900	mg/L	0.005	0.200	90	70.5 - 111

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3510C
QC Batch:	7493	Date Analyzed:	2004-02-11	Analyzed By:	AG

Prep Batch: 6674 Date Prepared: 2004-02-09 Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100
Toxaphene		<0.00500	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000630	mg/L	0.005	0.200	63	60.6 - 114
Deca chlorobiphenyl		0.000870	mg/L	0.005	0.200	87	70.5 - 111

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis: Pesticides Analytical Method: S 8081A Prep Method: S 3510C
QC Batch: 7493 Date Analyzed: 2004-02-11 Analyzed By: AG
Prep Batch: 6674 Date Prepared: 2004-02-09 Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100

continued . . .

sample 26813 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100
Toxaphene		<0.00500	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000890	mg/L	0.005	0.200	89	60.6 - 114
Deca chlorobiphenyl		0.000950	mg/L	0.005	0.200	95	70.5 - 111

Method Blank (1) QC Batch: 7493

Parameter	Flag	Result	Units	RL
alpha-BHC		<0.000500	mg/L	0.1
gamma-BHC (Lindane)		<0.000500	mg/L	0.1
beta-BHC		<0.000500	mg/L	0.1
delta-BHC		<0.000500	mg/L	0.1
Heptachlor		<0.000500	mg/L	0.1
Aldrin		<0.000500	mg/L	0.1
Heptachlor Epoxide		<0.000500	mg/L	0.1
gamma-Chlordane		<0.000500	mg/L	0.1
alpha-Chlordane		<0.000500	mg/L	0.1
Endosulfan I		<0.000500	mg/L	0.1
p,p-DDE		<0.000500	mg/L	0.1
Dieldrin		<0.000500	mg/L	0.1
Endrin		<0.000500	mg/L	0.1
p,p-DDD		<0.000500	mg/L	0.1
Endosulfan II		<0.000500	mg/L	0.1
p,p-DDT		<0.000500	mg/L	0.1
Endrin aldehyde		<0.000500	mg/L	0.1
Endosulfan sulfate		<0.000500	mg/L	0.1
Methoxychlor		<0.000500	mg/L	0.1
Endrin Ketone		<0.000500	mg/L	0.1
Toxaphene		<0.00500	mg/L	1
Technical Chlordane		<0.00500	mg/L	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000630	mg/L	0.005	0.200	63	60.6 - 114
Deca chlorobiphenyl		0.000810	mg/L	0.005	0.200	81	70.5 - 111

Laboratory Control Spike (LCS-1) QC Batch: 7493

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
alpha-BHC	0.000940	0.000920	mg/L	0.005	0.200	<0.00000846	94	2	67.1 - 109	20
gamma-BHC (Lindane)	0.000940	0.000920	mg/L	0.005	0.200	<0.00000809	94	2	72.4 - 105	20
beta-BHC	0.000910	0.000900	mg/L	0.005	0.200	<0.00000785	91	1	70.3 - 108	20
delta-BHC	0.000900	0.000890	mg/L	0.005	0.200	<0.0000113	90	1	67.8 - 110	20
Heptachlor	0.000900	0.000900	mg/L	0.005	0.200	<0.0000188	90	0	70.7 - 107	20
Aldrin	0.000970	0.000930	mg/L	0.005	0.200	<0.00000745	97	4	72.7 - 112	20
Heptachlor Epoxide	0.000890	0.000880	mg/L	0.005	0.200	<0.0000694	89	1	73 - 105	20
gamma-Chlordane	0.000880	0.000880	mg/L	0.005	0.200	<0.00000902	88	0	72.7 - 108	20
alpha-Chlordane	0.000890	0.000880	mg/L	0.005	0.200	<0.00000975	89	1	72 - 106	20
Endosulfan I	0.000890	0.000880	mg/L	0.005	0.200	<0.0000126	89	1	70.6 - 104	20
p,p-DDE	0.000840	0.000840	mg/L	0.005	0.200	<0.00000176	84	0	71.1 - 107	20
Dieldrin	0.000870	0.000870	mg/L	0.005	0.200	<0.0000140	87	0	72.9 - 102	20
Endrin	0.000920	0.000900	mg/L	0.005	0.200	<0.00000785	92	2	72.9 - 107	20
p,p-DDD	0.000870	0.000870	mg/L	0.005	0.200	<0.0000104	87	0	64.5 - 107	20
Endosulfan II	0.000850	0.000840	mg/L	0.005	0.200	<0.00000851	85	1	77.6 - 109	20
p,p-DDT	0.000820	0.000820	mg/L	0.005	0.200	<0.00000812	82	0	65.2 - 108	20
Endrin aldehyde	0.000870	0.000860	mg/L	0.005	0.200	<0.00000806	87	1	69.8 - 101	20
Endosulfan sulfate	0.000760	0.000770	mg/L	0.005	0.200	<0.00000689	76	1	33.3 - 127	20
Methoxychlor	0.000810	0.000800	mg/L	0.005	0.200	<0.0000130	81	1	71.6 - 110	20
Endrin Ketone	0.000850	0.000840	mg/L	0.005	0.200	<0.00000887	85	1	74.4 - 99.2	20
Toxaphene	0.00430	0.00430	mg/L	0.005	0.800	<0.000530	108	0	56.2 - 139	22
Technical Chlordane	0.00370	0.00350	mg/L	0.005	0.800	<0.000168	92	6	54.6 - 136	14

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2,4,5,6-Tetrachloro-m-xylene	0.000880	0.000860	mg/L	0.005	0.200	88	86	60.6 - 114
Deca chlorobiphenyl	0.000800	0.000800	mg/L	0.005	0.200	80	80	70.5 - 111

Matrix Spike (MS-1) QC Batch: 7493

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
alpha-BHC	0.000940	0.000940	mg/L	0.005	0.200	<0.00000846	94	0	48.9 - 96.7	20
gamma-BHC (Lindane)	0.000950	0.000960	mg/L	0.005	0.200	<0.00000809	95	1	50.8 - 102	20
beta-BHC	0.000980	0.000970	mg/L	0.005	0.200	<0.00000785	98	1	59.2 - 113	20
delta-BHC	0.000920	0.000920	mg/L	0.005	0.200	<0.0000113	92	0	52.6 - 127	20
Heptachlor	0.00100	0.00100	mg/L	0.005	0.200	<0.0000188	100	0	51 - 107	20
Aldrin	0.000960	0.000950	mg/L	0.005	0.200	<0.00000745	96	1	58.4 - 102	20
Heptachlor Epoxide	0.000940	0.000930	mg/L	0.005	0.200	<0.0000694	94	1	58.3 - 102	20
gamma-Chlordane	0.000960	0.000930	mg/L	0.005	0.200	<0.00000902	96	3	58.3 - 116	20
alpha-Chlordane	0.000960	0.000950	mg/L	0.005	0.200	<0.00000975	96	1	56.5 - 115	20
Endosulfan I	0.000930	0.000920	mg/L	0.005	0.200	<0.0000126	93	1	50.1 - 114	20
p,p-DDE	0.000940	0.000920	mg/L	0.005	0.200	<0.00000176	94	2	55.4 - 122	20
Dieldrin	0.000930	0.000910	mg/L	0.005	0.200	<0.0000140	93	2	52.6 - 118	20
Endrin	0.00100	0.00100	mg/L	0.005	0.200	<0.00000785	100	0	73 - 116	20
p,p-DDD	0.000860	0.000850	mg/L	0.005	0.200	<0.0000104	86	1	25.7 - 141	20
Endosulfan II	0.000960	0.000960	mg/L	0.005	0.200	<0.00000851	96	0	59.2 - 134	20
p,p-DDT	0.000820	0.000810	mg/L	0.005	0.200	<0.00000812	82	1	27 - 130	20
Endrin aldehyde	0.000960	0.000940	mg/L	0.005	0.200	<0.00000806	96	2	25.6 - 166	20
Endosulfan sulfate	0.000300	0.000290	mg/L	0.005	0.200	<0.00000689	30	3	0 - 95.5	20

continued . . .

matrix spikes continued ...

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Methoxychlor	0.000970	0.000960	mg/L	0.005	0.200	<0.0000130	97	1	51 - 158	20
Endrin Ketone	0.000930	0.000910	mg/L	0.005	0.200	<0.00000887	93	2	38.8 - 136	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2,4,5,6-Tetrachloro-m-xylene	0.000880	0.000890	mg/L	0.005	0.2	88	89	60.6 - 114
Deca chlorobiphenyl	0.00100	0.000980	mg/L	0.005	0.2	100	98	70.5 - 111

Standard (ICV-1) QC Batch: 7493

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.100	0.0976	98	85 - 115	2004-02-11
gamma-BHC (Lindane)		mg/L	0.100	0.0983	98	85 - 115	2004-02-11
beta-BHC		mg/L	0.100	0.101	101	85 - 115	2004-02-11
delta-BHC		mg/L	0.100	0.0923	92	85 - 115	2004-02-11
Heptachlor		mg/L	0.100	0.0911	91	85 - 115	2004-02-11
Aldrin		mg/L	0.100	0.0951	95	85 - 115	2004-02-11
Heptachlor Epoxide		mg/L	0.100	0.0965	96	85 - 115	2004-02-11
gamma-Chlordane		mg/L	0.100	0.0937	94	85 - 115	2004-02-11
alpha-Chlordane		mg/L	0.100	0.0960	96	85 - 115	2004-02-11
Endosulfan I		mg/L	0.100	0.0950	95	85 - 115	2004-02-11
p,p-DDE		mg/L	0.100	0.0915	92	85 - 115	2004-02-11
Dieldrin		mg/L	0.100	0.0958	96	85 - 115	2004-02-11
Endrin		mg/L	0.100	0.0947	95	85 - 115	2004-02-11
p,p-DDD		mg/L	0.100	0.0941	94	85 - 115	2004-02-11
Endosulfan II		mg/L	0.100	0.0931	93	85 - 115	2004-02-11
p,p-DDT		mg/L	0.100	0.0935	94	85 - 115	2004-02-11
Endrin aldehyde		mg/L	0.100	0.0856	86	85 - 115	2004-02-11
Endosulfan sulfate		mg/L	0.100	0.106	106	85 - 115	2004-02-11
Methoxychlor		mg/L	0.100	0.0865	86	85 - 115	2004-02-11
Endrin Ketone		mg/L	0.100	0.0861	86	85 - 115	2004-02-11
Toxaphene		mg/L	0.800	0.696	87	85 - 115	2004-02-11
Technical Chlordane		mg/L	0.800	0.685	86	85 - 115	2004-02-11

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.0933	mg/L	1	0.100	93	85 - 115
Deca chlorobiphenyl		0.0893	mg/L	1	0.100	89	85 - 115

Standard (CCV-1) QC Batch: 7493

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.100	0.103	103	85 - 115	2004-02-11
gamma-BHC (Lindane)		mg/L	0.100	0.102	102	85 - 115	2004-02-11
beta-BHC		mg/L	0.100	0.106	106	85 - 115	2004-02-11

continued ...

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
delta-BHC		mg/L	0.100	0.0999	100	85 - 115	2004-02-11
Heptachlor		mg/L	0.100	0.104	104	85 - 115	2004-02-11
Aldrin		mg/L	0.100	0.0986	99	85 - 115	2004-02-11
Heptachlor Epoxide		mg/L	0.100	0.100	100	85 - 115	2004-02-11
gamma-Chlordane		mg/L	0.100	0.0981	98	85 - 115	2004-02-11
alpha-Chlordane		mg/L	0.100	0.0979	98	85 - 115	2004-02-11
Endosulfan I		mg/L	0.100	0.0999	100	85 - 115	2004-02-11
p,p-DDE		mg/L	0.100	0.102	102	85 - 115	2004-02-11
Dieldrin		mg/L	0.100	0.101	101	85 - 115	2004-02-11
Endrin		mg/L	0.100	0.103	103	85 - 115	2004-02-11
p,p-DDD		mg/L	0.100	0.102	102	85 - 115	2004-02-11
Endosulfan II		mg/L	0.100	0.104	104	85 - 115	2004-02-11
p,p-DDT		mg/L	0.100	0.0978	98	85 - 115	2004-02-11
Endrin aldehyde		mg/L	0.100	0.103	103	85 - 115	2004-02-11
Endosulfan sulfate		mg/L	0.100	0.0890	89	85 - 115	2004-02-11
Methoxychlor		mg/L	0.100	0.101	101	85 - 115	2004-02-11
Endrin Ketone		mg/L	0.100	0.102	102	85 - 115	2004-02-11
Toxaphene		mg/L	0.800	0.688	86	85 - 115	2004-02-11
Technical Chlordane		mg/L	0.800	0.746	93	85 - 115	2004-02-11

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.0993	mg/L	1	0.100	99	85 - 115
Deca chlorobiphenyl		0.0937	mg/L	1	0.100	94	85 - 115

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7367	Date Analyzed:	2004-02-05	Analyzed By:	MK
Prep Batch:	6601	Date Prepared:	2004-02-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.50	s.u.	1	0.00

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7367	Date Analyzed:	2004-02-05	Analyzed By:	MK
Prep Batch:	6601	Date Prepared:	2004-02-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.50	s.u.	1	0.00

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7367	Date Analyzed:	2004-02-05	Analyzed By:	MK
Prep Batch:	6601	Date Prepared:	2004-02-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.50	s.u.	1	0.00

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7367	Date Analyzed:	2004-02-05	Analyzed By:	MK
Prep Batch:	6601	Date Prepared:	2004-02-05	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.50	s.u.	1	0.00

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7538	Date Analyzed:	2004-02-06	Analyzed By:	MK
Prep Batch:	6744	Date Prepared:	2004-02-06	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.50	s.u.	1	0.00

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	7538	Date Analyzed:	2004-02-06	Analyzed By:	MK
Prep Batch:	6744	Date Prepared:	2004-02-06	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.50	s.u.	1	0.00

Duplicate (1) QC Batch: 7367

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.50	7.50	s.u.	1	0	

Duplicate (1) QC Batch: 7538

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.50	7.50	s.u.	1	0	

Standard (ICV-1) QC Batch: 7367

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-05

Standard (CCV-1) QC Batch: 7367

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-05

Standard (ICV-1) QC Batch: 7538

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-06

Standard (CCV-1) QC Batch: 7538

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98 - 102	2004-02-06

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 21 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7479	Date Analyzed:	2004-02-11	Analyzed By:	RC
Prep Batch:	6633	Date Prepared:	2004-02-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00

continued . . .

sample 26797 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0165	mg/L	0.001	80.0	21	0 - 94
Phenol-d5		0.0120	mg/L	0.001	80.0	15	0 - 67
Nitrobenzene-d5		0.0482	mg/L	0.001	80.0	60	6.75 - 138.7
2-Fluorobiphenyl		0.0503	mg/L	0.001	80.0	63	14.7 - 135
2,4,6-Tribromophenol	[1]	0.0348	mg/L	0.001	80.0	44	44.92 - 152
Terphenyl-d14		0.0535	mg/L	0.001	80.0	67	44.49 - 162.36

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7479	Date Analyzed:	2004-02-11	Analyzed By:	RC
Prep Batch:	6633	Date Prepared:	2004-02-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00

continued . . .

[1]Sample surrogate recovery out of limits due to sample matrix.

sample 26799 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 26799 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0176	mg/L	0.001	80.0	22	0 - 94
Phenol-d5		0.0104	mg/L	0.001	80.0	13	0 - 67
Nitrobenzene-d5		0.0422	mg/L	0.001	80.0	53	6.75 - 138.7
2-Fluorobiphenyl		0.0440	mg/L	0.001	80.0	55	14.7 - 135
2,4,6-Tribromophenol		0.0449	mg/L	0.001	80.0	56	44.92 - 152
Terphenyl-d14		0.0484	mg/L	0.001	80.0	60	44.49 - 162.36

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7479	Date Analyzed:	2004-02-11	Analyzed By:	RC
Prep Batch:	6633	Date Prepared:	2004-02-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00

continued . . .

sample 26801 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 26801 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0224	mg/L	0.001	80.0	28	0 - 94
Phenol-d5		0.0128	mg/L	0.001	80.0	16	0 - 67
Nitrobenzene-d5		0.0479	mg/L	0.001	80.0	60	6.75 - 138.7
2-Fluorobiphenyl		0.0495	mg/L	0.001	80.0	62	14.7 - 135
2,4,6-Tribromophenol		0.0433	mg/L	0.001	80.0	54	44.92 - 152
Terphenyl-d14		0.0523	mg/L	0.001	80.0	65	44.49 - 162.36

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7479	Date Analyzed:	2004-02-11	Analyzed By:	RC
Prep Batch:	6633	Date Prepared:	2004-02-09	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00

continued . . .

sample 26803 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00

continued . . .

sample 26803 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0218	mg/L	0.001	80.0	27	0 - 94
Phenol-d5		0.0139	mg/L	0.001	80.0	17	0 - 67
Nitrobenzene-d5		0.0438	mg/L	0.001	80.0	55	6.75 - 138.7
2-Fluorobiphenyl		0.0461	mg/L	0.001	80.0	58	14.7 - 135
2,4,6-Tribromophenol		0.0474	mg/L	0.001	80.0	59	44.92 - 152
Terphenyl-d14		0.0554	mg/L	0.001	80.0	69	44.49 - 162.36

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7480	Date Analyzed:	2004-02-11	Analyzed By:	RC
Prep Batch:	6646	Date Prepared:	2004-02-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00

continued . . .

sample 26805 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00

continued . . .

sample 26805 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0187	mg/L	0.001	80.0	23	0 - 94
Phenol-d5		0.0114	mg/L	0.001	80.0	14	0 - 67
Nitrobenzene-d5		0.0431	mg/L	0.001	80.0	54	6.75 - 138.7
2-Fluorobiphenyl		0.0435	mg/L	0.001	80.0	54	14.7 - 135
2,4,6-Tribromophenol		0.0400	mg/L	0.001	80.0	50	44.92 - 152
Terphenyl-d14		0.0473	mg/L	0.001	80.0	59	44.49 - 162.36

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	7480	Date Analyzed:	2004-02-11	Analyzed By:	RC
Prep Batch:	6646	Date Prepared:	2004-02-10	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 26813 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0191	mg/L	0.001	80.0	24	0 - 94
Phenol-d5		0.0111	mg/L	0.001	80.0	14	0 - 67

continued . . .

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0415	mg/L	0.001	80.0	52	6.75 - 138.7
2-Fluorobiphenyl		0.0425	mg/L	0.001	80.0	53	14.7 - 135
2,4,6-Tribromophenol		0.0421	mg/L	0.001	80.0	53	44.92 - 152
Terphenyl-d14		0.0490	mg/L	0.001	80.0	61	44.49 - 162.36

Method Blank (1) QC Batch: 7479

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0154	mg/L	0.001	80.0	19	0 - 94.7
Phenol-d5		0.00837	mg/L	0.001	80.0	10	0 - 67.64
Nitrobenzene-d5		0.0580	mg/L	0.001	80.0	72	6.75 - 138.7
2-Fluorobiphenyl		0.0562	mg/L	0.001	80.0	70	14.71 - 134.97
2,4,6-Tribromophenol		0.0552	mg/L	0.001	80.0	69	44.92 - 152.29
Terphenyl-d14		0.0617	mg/L	0.001	80.0	77	44.49 - 162.36

Method Blank (1) QC Batch: 7480

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0152	mg/L	0.001	80.0	19	0 - 94.7
Phenol-d5		0.00817	mg/L	0.001	80.0	10	0 - 67.64
Nitrobenzene-d5		0.0574	mg/L	0.001	80.0	72	6.75 - 138.7
2-Fluorobiphenyl		0.0560	mg/L	0.001	80.0	70	14.71 - 134.97
2,4,6-Tribromophenol		0.0549	mg/L	0.001	80.0	69	44.92 - 152.29
Terphenyl-d14		0.0628	mg/L	0.001	80.0	78	44.49 - 162.36

Laboratory Control Spike (LCS-1) QC Batch: 7479

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	5.97	6.20	mg/L	1	80.0	<0.490	7	4	2.5 - 70.1	20
2-Chlorophenol	33.5	33.2	mg/L	1	80.0	<1.63	42	1	1.2 - 146.7	20
1,4-Dichlorobenzene (para)	45.5	45.9	mg/L	1	80.0	<1.93	57	1	26.7 - 125.6	20
n-Nitrosodi-n-propylamine	58.9	60.2	mg/L	1	80.0	<2.26	74	2	17.1 - 165.6	20
1,2,4-Trichlorobenzene	55.0	55.3	mg/L	1	80.0	<1.52	69	0	32.4 - 123.3	20
4-Chloro-3-methylphenol	46.8	47.8	mg/L	1	80.0	<1.60	58	2	12.7 - 130.6	20
Acenaphthene	71.7	71.5	mg/L	1	80.0	<1.58	90	0	39.6 - 138.4	20
4-Nitrophenol	5.61	8.67	mg/L	1	80.0	<3.83	7	43	0.2 - 72	20
2,4-Dinitrotoluene	74.8	75.2	mg/L	1	80.0	<2.09	94	0	22.8 - 173.4	20
Pentachlorophenol	39.8	40.6	mg/L	1	80.0	<3.04	50	2	0.9 - 133.5	20
Pyrene	84.7	84.2	mg/L	1	80.0	<1.81	106	0	42.9 - 144	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	8.08	8.05	mg/L	1	80.0	10	10	0 - 99.8
Phenol-d5	4.94	4.91	mg/L	1	80.0	6	6	0 - 77
Nitrobenzene-d5	44.3	44.4	mg/L	1	80.0	55	56	0 - 147.8
2-Fluorobiphenyl	48.9	49.4	mg/L	1	80.0	61	62	13.6 - 148.1
2,4,6-Tribromophenol	51.9	53.1	mg/L	1	80.0	65	66	2.2 - 140.2
Terphenyl-d14	64.9	64.1	mg/L	1	80.0	81	80	3.5 - 168.8

Laboratory Control Spike (LCS-1) QC Batch: 7480

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	6.10	6.11	mg/L	1	80.0	<0.490	8	0	2.5 - 70.1	20
2-Chlorophenol	32.8	34.2	mg/L	1	80.0	<1.63	41	4	1.2 - 146.7	20
1,4-Dichlorobenzene (para)	45.4	45.6	mg/L	1	80.0	<1.93	57	0	26.7 - 125.6	20
n-Nitrosodi-n-propylamine	61.1	60.9	mg/L	1	80.0	<2.26	76	0	17.1 - 165.6	20
1,2,4-Trichlorobenzene	55.6	54.6	mg/L	1	80.0	<1.52	70	2	32.4 - 123.3	20
4-Chloro-3-methylphenol	46.7	47.6	mg/L	1	80.0	<1.60	58	2	12.7 - 130.6	20

continued . . .

control spikes continued ...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Acenaphthene	72.0	71.8	mg/L	1	80.0	<1.58	90	0	39.6 - 138.4	20
4-Nitrophenol	5.63	8.84	mg/L	1	80.0	<3.83	7	44	0.2 - 72	20
2,4-Dinitrotoluene	73.2	74.8	mg/L	1	80.0	<2.09	92	2	22.8 - 173.4	20
Pentachlorophenol	42.5	42.6	mg/L	1	80.0	<3.04	53	0	0.9 - 133.5	20
Pyrene	84.7	85.2	mg/L	1	80.0	<1.81	106	0	42.9 - 144	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	9.46	9.72	mg/L	1	80.0	12	12	0 - 99.8
Phenol-d5	5.05	4.91	mg/L	1	80.0	6	6	0 - 77
Nitrobenzene-d5	45.1	44.6	mg/L	1	80.0	56	56	0 - 147.8
2-Fluorobiphenyl	49.1	48.9	mg/L	1	80.0	61	61	13.6 - 148.1
2,4,6-Tribromophenol	52.5	52.3	mg/L	1	80.0	66	65	2.2 - 140.2
Terphenyl-d14	65.2	65.2	mg/L	1	80.0	82	82	3.5 - 168.8

Standard (CCV-1) QC Batch: 7479

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	62.9	105	80 - 120	2004-02-11
1,4-Dichlorobenzene (para)		mg/L	60.0	60.9	102	80 - 120	2004-02-11
2-Nitrophenol		mg/L	60.0	67.4	112	80 - 120	2004-02-11
2,4-Dichlorophenol		mg/L	60.0	65.7	110	80 - 120	2004-02-11
Hexachlorobutadiene		mg/L	60.0	64.1	107	80 - 120	2004-02-11
4-Chloro-3-methylphenol		mg/L	60.0	66.2	110	80 - 120	2004-02-11
2,4,6-Trichlorophenol		mg/L	60.0	66.3	110	80 - 120	2004-02-11
Acenaphthene		mg/L	60.0	64.0	107	80 - 120	2004-02-11
Diphenylamine		mg/L	60.0	64.8	108	80 - 120	2004-02-11
Pentachlorophenol		mg/L	60.0	66.2	110	80 - 120	2004-02-11
Fluoranthene		mg/L	60.0	65.5	109	80 - 120	2004-02-11
Di-n-octylphthalate		mg/L	60.0	65.9	110	80 - 120	2004-02-11
Benzo(a)pyrene		mg/L	60.0	65.2	109	80 - 120	2004-02-11

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		67.3	mg/L	1	60.0	112	80 - 120
Phenol-d5		65.3	mg/L	1	60.0	109	80 - 120
Nitrobenzene-d5		64.5	mg/L	1	60.0	108	80 - 120
2-Fluorobiphenyl		65.0	mg/L	1	60.0	108	80 - 120
2,4,6-Tribromophenol		67.5	mg/L	1	60.0	112	80 - 120
Terphenyl-d14		68.1	mg/L	1	60.0	114	80 - 120

Standard (CCV-1) QC Batch: 7480

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	62.9	105	80 - 120	2004-02-11

continued ...

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
1,4-Dichlorobenzene (para)		mg/L	60.0	60.9	102	80 - 120	2004-02-11
2-Nitrophenol		mg/L	60.0	67.4	112	80 - 120	2004-02-11
2,4-Dichlorophenol		mg/L	60.0	65.7	110	80 - 120	2004-02-11
Hexachlorobutadiene		mg/L	60.0	64.1	107	80 - 120	2004-02-11
4-Chloro-3-methylphenol		mg/L	60.0	66.2	110	80 - 120	2004-02-11
2,4,6-Trichlorophenol		mg/L	60.0	66.3	110	80 - 120	2004-02-11
Acenaphthene		mg/L	60.0	64.0	107	80 - 120	2004-02-11
Diphenylamine		mg/L	60.0	64.8	108	80 - 120	2004-02-11
Pentachlorophenol		mg/L	60.0	66.2	110	80 - 120	2004-02-11
Fluoranthene		mg/L	60.0	65.5	109	80 - 120	2004-02-11
Di-n-octylphthalate		mg/L	60.0	65.9	110	80 - 120	2004-02-11
Benzo(a)pyrene		mg/L	60.0	65.2	109	80 - 120	2004-02-11

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		67.3	mg/L	1	60.0	112	80 - 120
Phenol-d5		65.3	mg/L	1	60.0	109	80 - 120
Nitrobenzene-d5		64.5	mg/L	1	60.0	108	80 - 120
2-Fluorobiphenyl		65.0	mg/L	1	60.0	108	80 - 120
2,4,6-Tribromophenol		67.5	mg/L	1	60.0	112	80 - 120
Terphenyl-d14		68.1	mg/L	1	60.0	114	80 - 120

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 3 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7627	Date Analyzed:	2004-02-09	Analyzed By:	MK
Prep Batch:	6823	Date Prepared:	2004-02-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		12400	mg/L	1	5.00

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7627	Date Analyzed:	2004-02-09	Analyzed By:	MK
Prep Batch:	6823	Date Prepared:	2004-02-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		29300	mg/L	1	5.00

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7627	Date Analyzed:	2004-02-09	Analyzed By:	MK
Prep Batch:	6823	Date Prepared:	2004-02-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		11600	mg/L	1	5.00

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7627	Date Analyzed:	2004-02-09	Analyzed By:	MK
Prep Batch:	6823	Date Prepared:	2004-02-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		29400	mg/L	1	5.00

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7627	Date Analyzed:	2004-02-09	Analyzed By:	MK
Prep Batch:	6823	Date Prepared:	2004-02-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		12400	mg/L	1	5.00

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	7627	Date Analyzed:	2004-02-09	Analyzed By:	MK
Prep Batch:	6823	Date Prepared:	2004-02-09	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		10400	mg/L	1	5.00

Method Blank (1) QC Batch: 7627

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Duplicate (1) QC Batch: 7627

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	10600	10400	mg/L	1	2	11

Standard (ICV-1) QC Batch: 7627

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1000	100	92 - 107	2004-02-09

Standard (CCV-1) QC Batch: 7627

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1020	102	92 - 107	2004-02-09

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7445	Date Analyzed:	2004-02-10	Analyzed By:	MW
Prep Batch:	6672	Date Prepared:	2004-02-09	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7445	Date Analyzed:	2004-02-10	Analyzed By:	MW
Prep Batch:	6672	Date Prepared:	2004-02-09	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7445	Date Analyzed:	2004-02-10	Analyzed By:	MW
Prep Batch:	6672	Date Prepared:	2004-02-09	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7445	Date Analyzed:	2004-02-10	Analyzed By:	MW
Prep Batch:	6672	Date Prepared:	2004-02-09	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7445	Date Analyzed:	2004-02-10	Analyzed By:	MW
Prep Batch:	6672	Date Prepared:	2004-02-09	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	7445	Date Analyzed:	2004-02-10	Analyzed By:	MW
Prep Batch:	6672	Date Prepared:	2004-02-09	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Method Blank (1) QC Batch: 7445

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	4

Laboratory Control Spike (LCS-1) QC Batch: 7445

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	46.2	46.8	mg/L	1	50.0	<5.05	92	1	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7445

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	35.0	28.8	mg/L	1	50.0	<5.05	70	19	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7445

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.54	91	85 - 115	2004-02-10

Standard (CCV-1) QC Batch: 7445

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.59	92	85 - 115	2004-02-10

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7490	Date Analyzed:	2004-02-10	Analyzed By:	RC
Prep Batch:	6700	Date Prepared:	2004-02-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7490	Date Analyzed:	2004-02-10	Analyzed By:	RC
Prep Batch:	6700	Date Prepared:	2004-02-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		5.57	mg/L	1	1.00

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7490	Date Analyzed:	2004-02-10	Analyzed By:	RC
Prep Batch:	6700	Date Prepared:	2004-02-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7490	Date Analyzed:	2004-02-10	Analyzed By:	RC
Prep Batch:	6700	Date Prepared:	2004-02-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		28.7	mg/L	1	1.00

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7518	Date Analyzed:	2004-02-10	Analyzed By:	RC
Prep Batch:	6700	Date Prepared:	2004-02-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		1.07	mg/L	1	1.00

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	7518	Date Analyzed:	2004-02-10	Analyzed By:	RC
Prep Batch:	6700	Date Prepared:	2004-02-10	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Method Blank (1) QC Batch: 7490

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Method Blank (1) QC Batch: 7518

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 7490

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	4.46	4.47	mg/L	1	5.00	<0.843	89	0	78 - 120	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7518

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	5.70	5.44	mg/L	1	5.00	<0.843	114	5	78 - 120	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7490

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon [1,2]	50.2	48.7	mg/L	1	5.00	28.7	430	3	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7518

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	6.82	6.88	mg/L	1	5.00	1.82	100	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7490

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.59	92	85 - 115	2004-02-10

Standard (CCV-1) QC Batch: 7490

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.63	113	85 - 115	2004-02-10

Standard (ICV-1) QC Batch: 7518

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.40	108	85 - 115	2004-02-10

Standard (CCV-1) QC Batch: 7518

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.99	100	85 - 115	2004-02-10

[1]Matrix spike result out of limits due to sample matrix.
[2]Matrix spike result out of limits due to sample matrix.

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7510	Date Analyzed:	2004-02-11	Analyzed By:	MW
Prep Batch:	6722	Date Prepared:	2004-02-11	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7510	Date Analyzed:	2004-02-11	Analyzed By:	MW
Prep Batch:	6722	Date Prepared:	2004-02-11	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7510	Date Analyzed:	2004-02-11	Analyzed By:	MW
Prep Batch:	6722	Date Prepared:	2004-02-11	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7510	Date Analyzed:	2004-02-11	Analyzed By:	MW
Prep Batch:	6722	Date Prepared:	2004-02-11	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7510	Date Analyzed:	2004-02-11	Analyzed By:	MW
Prep Batch:	6722	Date Prepared:	2004-02-11	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A
QC Batch:	7510	Date Analyzed:	2004-02-11	Analyzed By:	MW
Prep Batch:	6722	Date Prepared:	2004-02-11	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cyanide		<0.0100	mg/L	1	0.0100

Method Blank (1) QC Batch: 7510

Parameter	Flag	Result	Units	RL
Total Cyanide		<0.0100	mg/L	0.01

Laboratory Control Spike (LCS-1) QC Batch: 7510

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cyanide	0.0976	0.0997	mg/L	1	0.120	<0.00402	81	2	77.3 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7510

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cyanide	0.112	0.105	mg/L	1	0.120	<0.00402	93	6	0 - 167	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7510

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.120	0.122	102	85 - 115	2004-02-11

Standard (CCV-1) QC Batch: 7510

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.120	0.123	102	85 - 115	2004-02-11

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 11 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7590	Date Analyzed:	2004-02-16	Analyzed By:	RR
Prep Batch:	6644	Date Prepared:	2004-02-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.865	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		1.56	mg/L	1	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		0.590	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.0660	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		53.7	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		9.48	mg/L	1	0.00500
Total Vanadium		0.0260	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7590	Date Analyzed:	2004-02-16	Analyzed By:	RR
Prep Batch:	6644	Date Prepared:	2004-02-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.832	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		7.96	mg/L	1	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		1.54	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		0.432	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250

continued . . .

sample 26799 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Molybdenum		1.28	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		0.0850	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		23.6	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		7.52	mg/L	1	0.00500
Total Vanadium		0.0400	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7590	Date Analyzed:	2004-02-16	Analyzed By:	RR
Prep Batch:	6644	Date Prepared:	2004-02-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		2.70	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		1.79	mg/L	1	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0125	mg/L	1	0.0125
Total Iron		1.72	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.167	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		0.131	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		41.4	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		7.55	mg/L	1	0.00500
Total Vanadium		0.0310	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7590	Date Analyzed:	2004-02-16	Analyzed By:	RR
Prep Batch:	6644	Date Prepared:	2004-02-09	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.822	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		8.05	mg/L	1	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		1.04	mg/L	1	0.0100
Total Copper		0.0650	mg/L	1	0.0125
Total Iron		0.518	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.920	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		21.6	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		7.60	mg/L	1	0.00500
Total Vanadium		0.0410	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7487	Date Analyzed:	2004-02-11	Analyzed By:	RR
Prep Batch:	6680	Date Prepared:	2004-02-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.197	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		2.20	mg/L	1	0.00500
Total Barium		0.0320	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0250	mg/L	1	0.0250
Total Iron		0.0720	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.218	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		0.0580	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		25.5	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		8.76	mg/L	1	0.0100

continued . . .

sample 26805 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	7487	Date Analyzed:	2004-02-11	Analyzed By:	RR
Prep Batch:	6680	Date Prepared:	2004-02-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		0.311	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		1.35	mg/L	1	0.00500
Total Barium		0.0260	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		<0.0250	mg/L	1	0.0250
Total Iron		0.0950	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.315	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		57.8	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		15.9	mg/L	1	0.0100
Total Vanadium		0.0300	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Method Blank (1) QC Batch: 7487

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.0100	mg/L	0.01
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00500	mg/L	0.005
Total Cobalt		<0.0200	mg/L	0.02
Total Chromium		<0.0100	mg/L	0.01

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Total Copper		<0.0250	mg/L	0.025
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0250	mg/L	0.025
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0100	mg/L	0.01
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.0100	mg/L	0.01
Total Vanadium		<0.0250	mg/L	0.025
Total Zinc		<0.0250	mg/L	0.025

Method Blank (1) QC Batch: 7590

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.100	mg/L	0.1
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00500	mg/L	0.005
Total Cobalt		<0.0200	mg/L	0.02
Total Chromium		<0.0100	mg/L	0.01
Total Copper		<0.0125	mg/L	0.0125
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0250	mg/L	0.025
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0500	mg/L	0.05
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.00500	mg/L	0.005
Total Vanadium		<0.0250	mg/L	0.025
Total Zinc		<0.0250	mg/L	0.025

Laboratory Control Spike (LCS-1) QC Batch: 7487

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.129	0.127	mg/L	1	0.125	<0.00274	103	2	85 - 115	20
Total Aluminum	0.960	0.942	mg/L	1	1.00	<0.0133	96	2	85 - 115	20

continued . . .

control spikes continued ...

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Arsenic		0.538	0.514	mg/L	1	0.500	<0.00489	108	4	85 - 115	20
Total Boron		0.0540	0.0480	mg/L	1	0.0500	<0.00544	108	12	85 - 115	20
Total Barium		1.01	0.997	mg/L	1	1.00	<0.000450	101	1	85 - 114	20
Total Beryllium		0.0234	0.0230	mg/L	1	0.0250	<0.000178	94	2	85 - 115	20
Total Cadmium		0.256	0.251	mg/L	1	0.250	<0.000268	102	2	86 - 115	20
Total Cobalt		0.272	0.267	mg/L	1	0.250	<0.00293	109	2	87 - 113	20
Total Chromium		0.0980	0.101	mg/L	1	0.100	<0.00357	98	3	85 - 115	20
Total Copper		0.129	0.131	mg/L	1	0.125	<0.00127	103	2	85 - 113	20
Total Iron		0.501	0.498	mg/L	1	0.500	<0.00220	100	1	85 - 115	20
Total Manganese		0.251	0.250	mg/L	1	0.250	<0.000297	100	0	85 - 110	20
Total Molybdenum		0.515	0.501	mg/L	1	0.500	<0.00690	103	3	85 - 115	20
Total Nickel		0.258	0.262	mg/L	1	0.250	<0.000450	103	2	85 - 112	20
Total Phosphorous		0.532	0.564	mg/L	1	0.500	<0.0229	106	6	85 - 115	20
Total Lead		0.494	0.476	mg/L	1	0.500	<0.00698	99	4	86.1 - 112	20
Total Selenium		0.451	0.506	mg/L	1	0.500	<0.00556	90	11	85 - 113	20
Total Silica	[1][2]	0.973	0.952	mg/L	1	1.00	<0.00490	97	2	85 - 115	20
Total Tin	[3][4]	0.345	0.338	mg/L	1	0.300	<0.00759	115	2	85 - 115	20
Total Strontium		0.0510	0.0510	mg/L	1	0.0500	<0.000281	102	0	85 - 115	20
Total Vanadium		0.260	0.252	mg/L	1	0.250	<0.00105	104	3	85 - 115	20
Total Zinc		0.260	0.262	mg/L	1	0.250	<0.00300	104	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 7590

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.127	0.124	mg/L	1	0.125	<0.000199	102	2	85 - 115	20
Total Aluminum		1.04	0.942	mg/L	1	1.00	<0.00984	104	10	85 - 115	20
Total Arsenic		0.484	0.457	mg/L	1	0.500	<0.00860	97	6	85 - 115	20
Total Boron		0.0480	0.0430	mg/L	1	0.0500	<0.00366	96	11	85 - 115	20
Total Barium		1.04	1.02	mg/L	1	1.00	<0.000984	104	2	85 - 115	20
Total Beryllium		0.0250	0.0240	mg/L	1	0.0250	<0.000532	100	4	85 - 115	20
Total Cadmium		0.247	0.243	mg/L	1	0.250	<0.000577	99	2	85 - 115	20
Total Cobalt		0.252	0.254	mg/L	1	0.250	<0.000630	101	1	85 - 115	20
Total Chromium		0.107	0.108	mg/L	1	0.100	<0.000437	107	1	85 - 115	20
Total Copper		0.127	0.127	mg/L	1	0.125	<0.00164	102	0	85 - 115	20
Total Iron		0.499	0.495	mg/L	1	0.500	<0.00281	100	1	85 - 115	20
Total Manganese		0.251	0.252	mg/L	1	0.250	<0.00296	100	0	85 - 115	20
Total Molybdenum		0.520	0.524	mg/L	1	0.500	<0.00118	104	1	85 - 115	20
Total Nickel		0.242	0.243	mg/L	1	0.250	<0.00126	97	0	85 - 115	20
Total Phosphorous		0.490	0.479	mg/L	1	0.500	<0.00459	98	2	85 - 115	20
Total Lead		0.498	0.500	mg/L	1	0.500	<0.00310	100	0	85 - 115	20
Total Selenium		0.434	0.435	mg/L	1	0.500	<0.00370	87	0	85 - 115	20
Total Silica	[5][6]	1.06	1.05	mg/L	1	1.00	<0.00632	106	1	85 - 115	20

continued ...

[1]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[2]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[3]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[4]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[5]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.
[6]Changed spike amount from 0.5 to 1 due to concentration in spiking solution.

control spikes continued ...

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Tin	[7][8]	0.301	0.302	mg/L	1	0.300	<0.00238	100	0	85 - 115	20
Total Strontium		0.0500	0.0500	mg/L	1	0.0500	<0.000457	100	0	85 - 115	20
Total Vanadium		0.260	0.261	mg/L	1	0.250	<0.000371	104	0	85 - 115	20
Total Zinc		0.240	0.240	mg/L	1	0.250	<0.00151	96	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7487

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.133	0.135	mg/L	1	0.125	<0.00274	106	1	75 - 125	20
Total Aluminum		1.34	1.35	mg/L	1	1.00	0.311	103	1	75 - 125	20
Total Arsenic		0.555	0.554	mg/L	1	0.500	<0.00489	111	0	75 - 125	20
Total Boron		1.40	1.41	mg/L	1	0.0500	1.35	100	1	75 - 125	20
Total Barium		1.07	1.07	mg/L	1	1.00	0.026	104	0	75 - 125	20
Total Beryllium		0.0230	0.0240	mg/L	1	0.0250	<0.000178	92	4	75 - 125	20
Total Cadmium		0.254	0.254	mg/L	1	0.250	<0.000268	102	0	75 - 125	20
Total Cobalt		0.268	0.277	mg/L	1	0.250	<0.00293	107	3	75 - 125	20
Total Chromium		0.102	0.106	mg/L	1	0.100	<0.00357	102	4	75 - 125	20
Total Copper		0.139	0.136	mg/L	1	0.125	<0.00127	111	2	75 - 125	20
Total Iron		0.510	0.513	mg/L	1	0.500	0.095	83	0	75 - 125	20
Total Manganese		0.258	0.259	mg/L	1	0.250	<0.000297	103	0	75 - 125	20
Total Molybdenum		0.821	0.817	mg/L	1	0.500	0.315	101	0	75 - 125	20
Total Nickel		0.272	0.262	mg/L	1	0.250	<0.000450	109	4	75 - 125	20
Total Phosphorous		0.556	0.564	mg/L	1	0.500	0.049	101	1	75 - 125	20
Total Lead		0.544	0.538	mg/L	1	0.500	<0.00698	109	1	75 - 125	20
Total Selenium		0.521	0.508	mg/L	1	0.500	<0.00556	104	2	75 - 125	20
Total Silica		44.3	44.3	mg/L	1	0.500	43.8	100	0	75 - 125	20
Total Tin	[9][10]	0.280	0.285	mg/L	1	0.300	<0.00759	93	2	75 - 125	20
Total Strontium		9.94	9.94	mg/L	1	0.0500	9.89	100	0	75 - 125	20
Total Vanadium		0.263	0.269	mg/L	1	0.250	0.03	93	2	75 - 125	20
Total Zinc		0.276	0.272	mg/L	1	0.250	0.009	107	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 7590

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.134	0.132	mg/L	1	0.125	<0.000199	107	2	75 - 125	20
Total Aluminum		1.76	1.75	mg/L	1	1.00	0.865	90	0	75 - 125	20
Total Arsenic		0.492	0.522	mg/L	1	0.500	<0.00860	98	6	75 - 125	20
Total Boron		1.61	1.61	mg/L	1	0.0500	1.56	100	0	75 - 125	20
Total Barium		0.925	0.926	mg/L	1	1.00	0.021	90	0	75 - 125	20
Total Beryllium		0.0230	0.0240	mg/L	1	0.0250	<0.000532	92	4	75 - 125	20

continued ...

[7]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[8]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[9]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[10]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cadmium		0.212	0.218	mg/L	1	0.250	<0.000577	85	3	75 - 125	20
Total Cobalt		0.218	0.227	mg/L	1	0.250	<0.000630	87	4	75 - 125	20
Total Chromium		0.0940	0.0980	mg/L	1	0.100	<0.000437	94	4	75 - 125	20
Total Copper		0.139	0.134	mg/L	1	0.125	<0.00164	111	4	75 - 125	20
Total Iron		0.982	1.00	mg/L	1	0.500	0.59	78	2	75 - 125	20
Total Manganese		0.271	0.278	mg/L	1	0.250	<0.00296	108	2	75 - 125	20
Total Molybdenum		0.542	0.566	mg/L	1	0.500	0.066	95	4	75 - 125	20
Total Nickel		0.270	0.270	mg/L	1	0.250	<0.00126	108	0	75 - 125	20
Total Phosphorous		0.590	0.630	mg/L	1	0.500	0.038	110	6	75 - 125	20
Total Lead		0.426	0.426	mg/L	1	0.500	<0.00310	85	0	75 - 125	20
Total Selenium		0.610	0.545	mg/L	1	0.500	<0.00370	122	11	75 - 125	20
Total Silica		54.2	54.2	mg/L	1	0.500	53.7	100	0	75 - 125	20
Total Tin	[11][12]	0.229	0.234	mg/L	1	0.300	<0.00238	76	2	75 - 125	20
Total Strontium		9.53	9.53	mg/L	1	0.0500	9.48	100	0	75 - 125	20
Total Vanadium		0.275	0.284	mg/L	1	0.250	0.026	100	3	75 - 125	20
Total Zinc		0.224	0.232	mg/L	1	0.250	0.011	85	4	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 7487

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.123	98	90 - 110	2004-02-11
Total Aluminum		mg/L	1.00	0.941	94	90 - 110	2004-02-11
Total Arsenic		mg/L	1.00	0.997	100	90 - 110	2004-02-11
Total Boron		mg/L	1.00	1.00	100	90 - 110	2004-02-11
Total Barium		mg/L	1.00	0.996	100	90 - 110	2004-02-11
Total Beryllium		mg/L	1.00	0.986	99	90 - 110	2004-02-11
Total Cadmium		mg/L	1.00	0.966	97	90 - 110	2004-02-11
Total Cobalt		mg/L	1.00	0.993	99	90 - 110	2004-02-11
Total Chromium		mg/L	1.00	0.992	99	90 - 110	2004-02-11
Total Copper		mg/L	1.00	0.961	96	90 - 110	2004-02-11
Total Iron		mg/L	1.00	0.985	98	90 - 110	2004-02-11
Total Manganese		mg/L	1.00	0.982	98	90 - 110	2004-02-11
Total Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-02-11
Total Nickel		mg/L	1.00	0.951	95	90 - 110	2004-02-11
Total Phosphorous		mg/L	5.00	4.92	98	90 - 110	2004-02-11
Total Lead		mg/L	1.00	0.994	99	90 - 110	2004-02-11
Total Selenium		mg/L	1.00	0.942	94	90 - 110	2004-02-11
Total Silica		mg/L	5.00	5.10	102	90 - 110	2004-02-11
Total Tin		mg/L	1.00	0.967	97	90 - 110	2004-02-11
Total Strontium		mg/L	1.00	0.987	99	90 - 110	2004-02-11
Total Vanadium		mg/L	1.00	1.02	102	90 - 110	2004-02-11
Total Zinc		mg/L	1.00	0.975	98	90 - 110	2004-02-11

Standard (CCV-1) QC Batch: 7487

[11] Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[12] Changed spike amount from 30 to 0.3 due to concentration in spiking solution.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.123	98	90 - 110	2004-02-11
Total Aluminum		mg/L	1.00	0.971	97	90 - 110	2004-02-11
Total Arsenic		mg/L	1.00	1.02	102	90 - 110	2004-02-11
Total Boron		mg/L	1.00	1.00	100	90 - 110	2004-02-11
Total Barium		mg/L	1.00	1.03	103	90 - 110	2004-02-11
Total Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-02-11
Total Cadmium		mg/L	1.00	0.997	100	90 - 110	2004-02-11
Total Cobalt		mg/L	1.00	1.01	101	90 - 110	2004-02-11
Total Chromium		mg/L	1.00	1.02	102	90 - 110	2004-02-11
Total Copper		mg/L	1.00	0.983	98	90 - 110	2004-02-11
Total Iron		mg/L	1.00	1.02	102	90 - 110	2004-02-11
Total Manganese		mg/L	1.00	1.01	101	90 - 110	2004-02-11
Total Molybdenum		mg/L	1.00	0.996	100	90 - 110	2004-02-11
Total Nickel		mg/L	1.00	0.968	97	90 - 110	2004-02-11
Total Phosphorous		mg/L	5.00	4.98	100	90 - 110	2004-02-11
Total Lead		mg/L	1.00	0.978	98	90 - 110	2004-02-11
Total Selenium		mg/L	1.00	0.978	98	90 - 110	2004-02-11
Total Silica		mg/L	5.00	5.25	105	90 - 110	2004-02-11
Total Tin		mg/L	1.00	1.03	103	90 - 110	2004-02-11
Total Strontium		mg/L	1.00	1.03	103	90 - 110	2004-02-11
Total Vanadium		mg/L	1.00	1.04	104	90 - 110	2004-02-11
Total Zinc		mg/L	1.00	0.982	98	90 - 110	2004-02-11

Standard (ICV-1) QC Batch: 7590

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.124	99	90 - 110	2004-02-16
Total Aluminum		mg/L	1.00	0.982	98	90 - 110	2004-02-16
Total Arsenic		mg/L	1.00	0.988	99	90 - 110	2004-02-16
Total Boron		mg/L	1.00	1.01	101	90 - 110	2004-02-16
Total Barium		mg/L	1.00	0.995	100	90 - 110	2004-02-16
Total Beryllium		mg/L	1.00	0.986	99	90 - 110	2004-02-16
Total Cadmium		mg/L	1.00	0.996	100	90 - 110	2004-02-16
Total Cobalt		mg/L	1.00	0.995	100	90 - 110	2004-02-16
Total Chromium		mg/L	1.00	0.994	99	90 - 110	2004-02-16
Total Copper		mg/L	1.00	0.992	99	90 - 110	2004-02-16
Total Iron		mg/L	1.00	0.993	99	90 - 110	2004-02-16
Total Manganese		mg/L	1.00	0.997	100	90 - 110	2004-02-16
Total Molybdenum		mg/L	1.00	0.987	99	90 - 110	2004-02-16
Total Nickel		mg/L	1.00	0.994	99	90 - 110	2004-02-16
Total Phosphorous		mg/L	5.00	4.96	99	90 - 110	2004-02-16
Total Lead		mg/L	1.00	0.992	99	90 - 110	2004-02-16
Total Selenium		mg/L	1.00	0.991	99	90 - 110	2004-02-16
Total Silica		mg/L	5.00	4.96	99	90 - 110	2004-02-16
Total Tin		mg/L	1.00	0.988	99	90 - 110	2004-02-16
Total Strontium		mg/L	1.00	1.00	100	90 - 110	2004-02-16
Total Vanadium		mg/L	1.00	0.991	99	90 - 110	2004-02-16
Total Zinc		mg/L	1.00	0.996	100	90 - 110	2004-02-16

Standard (CCV-1) QC Batch: 7590

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.118	94	90 - 110	2004-02-16
Total Aluminum		mg/L	1.00	0.923	92	90 - 110	2004-02-16
Total Arsenic		mg/L	1.00	0.958	96	90 - 110	2004-02-16
Total Boron		mg/L	1.00	0.932	93	90 - 110	2004-02-16
Total Barium		mg/L	1.00	0.958	96	90 - 110	2004-02-16
Total Beryllium		mg/L	1.00	0.952	95	90 - 110	2004-02-16
Total Cadmium		mg/L	1.00	0.960	96	90 - 110	2004-02-16
Total Cobalt		mg/L	1.00	0.961	96	90 - 110	2004-02-16
Total Chromium		mg/L	1.00	0.954	95	90 - 110	2004-02-16
Total Copper		mg/L	1.00	0.942	94	90 - 110	2004-02-16
Total Iron		mg/L	1.00	0.958	96	90 - 110	2004-02-16
Total Manganese		mg/L	1.00	0.960	96	90 - 110	2004-02-16
Total Molybdenum		mg/L	1.00	0.947	95	90 - 110	2004-02-16
Total Nickel		mg/L	1.00	0.955	96	90 - 110	2004-02-16
Total Phosphorous		mg/L	5.00	4.96	99	90 - 110	2004-02-16
Total Lead		mg/L	1.00	0.956	96	90 - 110	2004-02-16
Total Selenium		mg/L	1.00	0.957	96	90 - 110	2004-02-16
Total Silica		mg/L	5.00	4.80	96	90 - 110	2004-02-16
Total Tin		mg/L	1.00	0.957	96	90 - 110	2004-02-16
Total Strontium		mg/L	1.00	0.967	97	90 - 110	2004-02-16
Total Vanadium		mg/L	1.00	0.945	94	90 - 110	2004-02-16
Total Zinc		mg/L	1.00	0.970	97	90 - 110	2004-02-16

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7359	Date Analyzed:	2004-02-06	Analyzed By:	BP
Prep Batch:	6588	Date Prepared:	2004-02-06	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.8	mg/L	0.1	150	112	81.8 - 161

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7359	Date Analyzed:	2004-02-06	Analyzed By:	BP
Prep Batch:	6588	Date Prepared:	2004-02-06	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.9	mg/L	0.1	150	106	81.8 - 161

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7359	Date Analyzed:	2004-02-06	Analyzed By:	BP
Prep Batch:	6588	Date Prepared:	2004-02-06	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.6	mg/L	0.1	150	111	81.8 - 161

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7359	Date Analyzed:	2004-02-06	Analyzed By:	BP
Prep Batch:	6588	Date Prepared:	2004-02-06	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.7	mg/L	0.1	150	112	81.8 - 161

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7416	Date Analyzed:	2004-02-10	Analyzed By:	BP
Prep Batch:	6645	Date Prepared:	2004-02-09	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.0	mg/L	0.1	150	107	81.8 - 161

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	7416	Date Analyzed:	2004-02-10	Analyzed By:	BP
Prep Batch:	6645	Date Prepared:	2004-02-09	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.5	mg/L	0.1	150	103	81.8 - 161

Method Blank (1) QC Batch: 7359

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.4	mg/L	0.1	150	103	81.8 - 161

Method Blank (1) QC Batch: 7416

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.8	mg/L	0.1	150	105	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 7359

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	25.8	29.2	mg/L	0.1	250	<0.538	103	12	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	15.7	17.7	mg/L	0.1	150	104	118	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 7416

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	25.9	26.0	mg/L	0.1	250	<0.538	104	0	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	15.6	16.1	mg/L	0.1	150	104	107	81.8 - 161

Standard (ICV-1) QC Batch: 7359

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	272	109	68 - 140	2004-02-06

Standard (CCV-1) QC Batch: 7359

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	273	109	68 - 140	2004-02-06

Standard (ICV-1) QC Batch: 7416

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	256	102	68 - 140	2004-02-10

Standard (CCV-1) QC Batch: 7416

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	266	106	68 - 140	2004-02-10

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7403	Date Analyzed:	2004-02-06	Analyzed By:	BS
Prep Batch:	6632	Date Prepared:	2004-02-06	Prepared By:	BS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0928	mg/L	1	0.100	93	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0726	mg/L	1	0.100	73	70 - 130

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7403	Date Analyzed:	2004-02-06	Analyzed By:	BS
Prep Batch:	6632	Date Prepared:	2004-02-06	Prepared By:	BS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0942	mg/L	1	0.100	94	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0743	mg/L	1	0.100	74	70 - 130

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7403	Date Analyzed:	2004-02-06	Analyzed By:	BS
Prep Batch:	6632	Date Prepared:	2004-02-06	Prepared By:	BS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0943	mg/L	1	0.100	94	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0742	mg/L	1	0.100	74	70 - 130

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	7403	Date Analyzed:	2004-02-06	Analyzed By:	BS

Prep Batch: 6632 Date Prepared: 2004-02-06 Prepared By: BS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0923	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0739	mg/L	1	0.100	74	70 - 130

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
QC Batch: 7471 Date Analyzed: 2004-02-10 Analyzed By: BS
Prep Batch: 6690 Date Prepared: 2004-02-10 Prepared By: BS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0941	mg/L	1	0.100	94	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0747	mg/L	1	0.100	75	70 - 130

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
QC Batch: 7471 Date Analyzed: 2004-02-10 Analyzed By: BS
Prep Batch: 6690 Date Prepared: 2004-02-10 Prepared By: BS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0966	mg/L	1	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0746	mg/L	1	0.100	75	70 - 130

Method Blank (1) QC Batch: 7403

Parameter	Flag	Result	Units	RL
GRO		<0.100	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0879	mg/L	1	0.100	88	44.8 - 160
4-Bromofluorobenzene (4-BFB)		0.0685	mg/L	1	0.100	68	44.1 - 133

Method Blank (1) QC Batch: 7471

Parameter	Flag	Result	Units	RL
GRO		0.205	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0937	mg/L	1	0.100	94	44.8 - 160
4-Bromofluorobenzene (4-BFB)		0.0717	mg/L	1	0.100	72	44.1 - 133

Laboratory Control Spike (LCS-1) QC Batch: 7403

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	1.05	1.09	mg/L	1	1.00	<0.0261	105	4	68.8 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0929	0.0945	mg/L	1	0.100	93	94	53.5 - 145
4-Bromofluorobenzene (4-BFB)	0.0823	0.0837	mg/L	1	0.100	82	84	54.5 - 134

Laboratory Control Spike (LCS-1) QC Batch: 7471

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	1.13	1.05	mg/L	1	1.00	<0.0261	113	7	68.8 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0947	0.0911	mg/L	1	0.100	95	91	53.5 - 145
4-Bromofluorobenzene (4-BFB)	0.0820	0.0821	mg/L	1	0.100	82	82	54.5 - 134

Standard (ICV-1) QC Batch: 7403

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.05	105	85 - 115	2004-02-06

Standard (CCV-1) QC Batch: 7403

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.03	103	85 - 115	2004-02-06

Standard (ICV-1) QC Batch: 7471

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.03	103	85 - 115	2004-02-10

Standard (CCV-1) QC Batch: 7471

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.10	110	85 - 115	2004-02-10

Analytical and Quality Control Report

Len Habel
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: February 19, 2004

Work Order: 4020523

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
26797	HLSF-3839-HMW-029-0204	water	2004-02-04	14:50	2004-02-05
26798	HLSF-3839-TB-0204-193	water	2004-02-04	14:50	2004-02-05
26799	HLSF-3839-HMW-033-0204	water	2004-02-04	14:35	2004-02-05
26800	HLSF-3839-TB-0204-195	water	2004-02-04	14:35	2004-02-05
26801	HLSF-3839-HMW-034-0204	water	2004-02-04	12:15	2004-02-05
26802	HLSF-3839-TB-0204-197	water	2004-02-04	12:15	2004-02-05
26803	HLSF-3839-HMW-133-0204	water	2004-02-04	14:35	2004-02-05
26804	HLSF-3839-TB-0204-196	water	2004-02-04	14:35	2004-02-05
26805	HLSF-3839-HMW-032-0204	water	2004-02-05	10:30	2004-02-05
26806	HLSF-3839-TB-0204-194	water	2004-02-05	10:30	2004-02-05
26813	HLSF-3839-HMW-035-0204	water	2004-02-05	13:30	2004-02-05
26814	HLSF-3839-TB-0204-198	water	2004-02-05	13:30	2004-02-05

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 24 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 26797 - HLSF-3839-HMW-029-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG
Prep Batch:	6726	Date Prepared:	2004-02-11	Prepared By:	JG

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

continued . . .

sample 26797 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.0	μg/L	1	50.0	100	70 - 130
Toluene-d8		47.6	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		45.3	μg/L	1	50.0	91	70 - 130

Sample: 26798 - HLSF-3839-TB-0204-193

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG
Prep Batch:	6726	Date Prepared:	2004-02-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00

continued . . .

sample 26798 continued . . .

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

continued . . .

sample 26798 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.2	μg/L	1	50.0	100	70 - 130
Toluene-d8		47.4	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		45.2	μg/L	1	50.0	90	70 - 130

Sample: 26799 - HLSF-3839-HMW-033-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG
Prep Batch:	6726	Date Prepared:	2004-02-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		4.16	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		1.62	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00

continued . . .

sample 26799 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		6.57	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		<1.00	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.9	μg/L	1	50.0	100	70 - 130
Toluene-d8		47.4	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		44.6	μg/L	1	50.0	89	70 - 130

Sample: 26800 - HLSF-3839-TB-0204-195

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG
Prep Batch:	6726	Date Prepared:	2004-02-11	Prepared By:	JG

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

continued . . .

sample 26800 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.9	μg/L	1	50.0	100	70 - 130
Toluene-d8		47.3	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		45.2	μg/L	1	50.0	90	70 - 130

Sample: 26801 - HLSF-3839-HMW-034-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG
Prep Batch:	6726	Date Prepared:	2004-02-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00

continued . . .

sample 26801 continued . . .

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

continued . . .

sample 26801 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.1	μg/L	1	50.0	100	70 - 130
Toluene-d8		47.8	μg/L	1	50.0	96	70 - 130
4-Bromofluorobenzene (4-BFB)		44.7	μg/L	1	50.0	89	70 - 130

Sample: 26802 - HLSF-3839-TB-0204-197

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG
Prep Batch:	6726	Date Prepared:	2004-02-11	Prepared By:	JG

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

continued . . .

sample 26802 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.1	μg/L	1	50.0	100	70 - 130
Toluene-d8		47.1	μg/L	1	50.0	94	70 - 130
4-Bromofluorobenzene (4-BFB)		45.1	μg/L	1	50.0	90	70 - 130

Sample: 26803 - HLSF-3839-HMW-133-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG
Prep Batch:	6726	Date Prepared:	2004-02-11	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		3.99	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		1.54	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		5.96	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00

continued . . .

sample 26803 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.7	μg/L	1	50.0	101	70 - 130
Toluene-d8		47.5	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		44.6	μg/L	1	50.0	89	70 - 130

Sample: 26804 - HLSF-3839-TB-0204-196

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG
Prep Batch:	6726	Date Prepared:	2004-02-11	Prepared By:	JG

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

continued . . .

sample 26804 continued . . .

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

continued . . .

sample 26804 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.6	μg/L	1	50.0	99	70 - 130
Toluene-d8		47.3	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		45.1	μg/L	1	50.0	90	70 - 130

Sample: 26805 - HLSF-3839-HMW-032-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG
Prep Batch:	6726	Date Prepared:	2004-02-11	Prepared By:	JG

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

continued . . .

sample 26805 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.2	μg/L	1	50.0	100	70 - 130
Toluene-d8		47.4	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		44.8	μg/L	1	50.0	90	70 - 130

Sample: 26806 - HLSF-3839-TB-0204-194

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG

Prep Batch: 6726 Date Prepared: 2004-02-11 Prepared By: JG

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

continued . . .

sample 26806 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.3	μg/L	1	50.0	101	70 - 130
Toluene-d8		47.0	μg/L	1	50.0	94	70 - 130
4-Bromofluorobenzene (4-BFB)		45.1	μg/L	1	50.0	90	70 - 130

Sample: 26813 - HLSF-3839-HMW-035-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG
Prep Batch:	6726	Date Prepared:	2004-02-11	Prepared By:	JG

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

continued . . .

sample 26813 continued . . .

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

continued . . .

sample 26813 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.3	μg/L	1	50.0	101	70 - 130
Toluene-d8		47.6	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		45.1	μg/L	1	50.0	90	70 - 130

Sample: 26814 - HLSF-3839-TB-0204-198

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	7512	Date Analyzed:	2004-02-11	Analyzed By:	JG
Prep Batch:	6726	Date Prepared:	2004-02-11	Prepared By:	JG

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

continued . . .

sample 26814 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.2	μg/L	1	50.0	100	70 - 130
Toluene-d8		47.7	μg/L	1	50.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)		44.6	μg/L	1	50.0	89	70 - 130

Method Blank (1) QC Batch: 7512

Parameter	Flag	Result	Units	RL
Bromochloromethane		<1.00	μg/L	1

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Dichlorodifluoromethane		<1.00	μg/L	1
Chloromethane (methyl chloride)		<1.00	μg/L	1
Vinyl Chloride		<1.00	μg/L	1
Bromomethane (methyl bromide)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.6	μg/L	1	50.0	99	70 - 130
Toluene-d8		48.0	μg/L	1	50.0	96	70 - 130
4-Bromofluorobenzene (4-BFB)		46.1	μg/L	1	50.0	92	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 7512

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	92.1	92.0	μg/L	1	100	<0.136	92	0	78 - 120	20
Benzene	91.5	90.8	μg/L	1	100	<0.146	92	1	84.2 - 108	20
Trichloroethene (TCE)	93.5	93.0	μg/L	1	100	0.14	94	0	85.8 - 106	20
Toluene	92.5	92.0	μg/L	1	100	0.2	92	0	77.2 - 104	20
Chlorobenzene	93.3	94.4	μg/L	1	100	<0.0540	93	1	82.1 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	49.0	49.1	μg/L	1	50.0	98	98	84.2 - 115
Toluene-d8	47.3	47.4	μg/L	1	50.0	95	95	94.6 - 103
4-Bromofluorobenzene (4-BFB)	46.2	46.6	μg/L	1	50.0	92	93	82.4 - 102

Matrix Spike (MS-1) QC Batch: 7512

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	91.2	91.5	μg/L	1	100	<0.136	91	0	74.6 - 124	20
Benzene	90.6	90.8	μg/L	1	100	<0.146	91	0	88.1 - 114	20
Trichloroethene (TCE)	92.8	92.4	μg/L	1	100	<0.117	93	0	86.7 - 104	20

continued . . .

matrix spikes continued ...

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Toluene	91.6	91.6	μg/L	1	100	<0.0600	92	0	84 - 114	20
Chlorobenzene	93.0	93.6	μg/L	1	100	<0.0540	93	1	92.3 - 109	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	49.5	49.8	μg/L	1	50	99	100	86.5 - 113
Toluene-d8	47.3	47.3	μg/L	1	50	95	95	93.7 - 105
4-Bromofluorobenzene (4-BFB)	46.4	45.7	μg/L	1	50	93	91	76.2 - 107

Standard (CCV-1) QC Batch: 7512

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	49.5	99	80 - 120	2004-02-11
1,1-Dichloroethene		μg/L	50.0	49.6	99	80 - 120	2004-02-11
Chloroform		μg/L	50.0	46.8	94	80 - 120	2004-02-11
1,2-Dichloropropane		μg/L	50.0	48.8	98	80 - 120	2004-02-11
Toluene		μg/L	50.0	48.5	97	80 - 120	2004-02-11
Chlorobenzene		μg/L	50.0	49.9	100	80 - 120	2004-02-11
Ethylbenzene		μg/L	50.0	50.5	101	80 - 120	2004-02-11

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	11056	Date Analyzed:	2004-07-12	Analyzed By:	MK
Prep Batch:	9771	Date Prepared:	2004-07-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		170	mg/L as CaCo3	1	4.00
Total Alkalinity		170	mg/L as CaCo3	1	4.00

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	11056	Date Analyzed:	2004-07-12	Analyzed By:	MK
Prep Batch:	9771	Date Prepared:	2004-07-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		178	mg/L as CaCo3	1	4.00
Total Alkalinity		178	mg/L as CaCo3	1	4.00

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	11056	Date Analyzed:	2004-07-12	Analyzed By:	MK
Prep Batch:	9771	Date Prepared:	2004-07-12	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		212	mg/L as CaCo3	1	4.00
Total Alkalinity		212	mg/L as CaCo3	1	4.00

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	11558	Date Analyzed:	2004-07-29	Analyzed By:	JG
Prep Batch:	10210	Date Prepared:	2004-07-29	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00

continued . . .

sample 39196 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Bicarbonate Alkalinity		162	mg/L as CaCo3	1	4.00
Total Alkalinity		162	mg/L as CaCo3	1	4.00

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	11558	Date Analyzed:	2004-07-29	Analyzed By:	JG
Prep Batch:	10210	Date Prepared:	2004-07-29	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		178	mg/L as CaCo3	1	4.00
Total Alkalinity		178	mg/L as CaCo3	1	4.00

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	11558	Date Analyzed:	2004-07-29	Analyzed By:	JG
Prep Batch:	10210	Date Prepared:	2004-07-29	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		180	mg/L as CaCo3	1	4.00
Total Alkalinity		180	mg/L as CaCo3	1	4.00

Method Blank (1) QC Batch: 11056

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 11558

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Duplicate (1) QC Batch: 11056

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Bicarbonate Alkalinity	212	212	mg/L as CaCo3	1	0	6.3
Total Alkalinity	212	212	mg/L as CaCo3	1	0	6.3

Duplicate (1) QC Batch: 11558

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Bicarbonate Alkalinity	160	152	mg/L as CaCo3	1	5	6.3
Total Alkalinity	160	152	mg/L as CaCo3	1	5	6.3

Standard (ICV-1) QC Batch: 11056

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 105	2004-07-12

Standard (CCV-1) QC Batch: 11056

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 105	2004-07-12

Standard (ICV-1) QC Batch: 11558

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 105	2004-07-29

Standard (CCV-1) QC Batch: 11558

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 105	2004-07-29

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3838-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3838-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3838-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	10897	Date Analyzed:	2004-07-07	Analyzed By:	MW
Prep Batch:	9636	Date Prepared:	2004-07-07	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		< 1.00	mg/L	1	1.00

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11057	Date Analyzed:	2004-07-14	Analyzed By:	WB
Prep Batch:	9772	Date Prepared:	2004-07-14	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 38118 - HLSF-3838-HMW-029-0604

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11057	Date Analyzed:	2004-07-14	Analyzed By:	WB
Prep Batch:	9772	Date Prepared:	2004-07-14	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		4.00	mg/L	1	1.00

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11309	Date Analyzed:	2004-07-23	Analyzed By:	WB
Prep Batch:	10000	Date Prepared:	2004-07-23	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 39334 - HLSF-3838-HMW-033-0704

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11309	Date Analyzed:	2004-07-23	Analyzed By:	WB
Prep Batch:	10000	Date Prepared:	2004-07-23	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 39336 - HLSF-3838-HMW-133-0704

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	11524	Date Analyzed:	2004-07-29	Analyzed By:	WB
Prep Batch:	10185	Date Prepared:	2004-07-29	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Method Blank (1) QC Batch: 10897

Parameter	Flag	Result	Units	RL
Ammonia-N		< 1.00	mg/L	1

Method Blank (1) QC Batch: 11057

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Method Blank (1) QC Batch: 11309

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Method Blank (1) QC Batch: 11524

Parameter	Flag	Result	Units	RL
Ammonia-N		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 10897

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.48	4.37	mg/L	1	5.00	<0.318	90	2	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11309

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.42	4.26	mg/L	1	5.00	<0.318	88	4	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11524

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.42	4.59	mg/L	1	5.00	<0.318	88	4	78.5 - 105	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10897

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.37	4.82	mg/L	1	5.00	<0.318	87	10	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11057

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.20	4.20	mg/L	1	5.00	<0.318	84	0	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11309

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.20	4.03	mg/L	1	5.00	<0.318	84	4	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11524

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ammonia-N	4.59	4.59	mg/L	1	5.00	<0.318	92	0	74.2 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 10897

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.59	92	85 - 115	2004-07-07

Standard (CCV-1) QC Batch: 10897

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.31	86	85 - 115	2004-07-07

Standard (ICV-1) QC Batch: 11057

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.42	88	85 - 115	2004-07-14

Standard (CCV-1) QC Batch: 11057

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.31	86	85 - 115	2004-07-14

Standard (ICV-1) QC Batch: 11309

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.59	92	85 - 115	2004-07-23

Standard (CCV-1) QC Batch: 11309

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.82	96	85 - 115	2004-07-23

Standard (ICV-1) QC Batch: 11524

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.48	90	85 - 115	2004-07-29

Standard (CCV-1) QC Batch: 11524

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.65	93	85 - 115	2004-07-29

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	10818	Date Analyzed:	2004-07-01	Analyzed By:	MK
Prep Batch:	9561	Date Prepared:	2004-07-01	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		11600	μMHOS/cm	1	0.00

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	10818	Date Analyzed:	2004-07-01	Analyzed By:	MK
Prep Batch:	9561	Date Prepared:	2004-07-01	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		12400	μMHOS/cm	1	0.00

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11113	Date Analyzed:	2004-07-15	Analyzed By:	JR
Prep Batch:	9819	Date Prepared:	2004-07-15	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		12900	μMHOS/cm	1	0.00

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11217	Date Analyzed:	2004-07-21	Analyzed By:	JR
Prep Batch:	9919	Date Prepared:	2004-07-21	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		13100	μMHOS/cm	1	0.00

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11217	Date Analyzed:	2004-07-21	Analyzed By:	JR
Prep Batch:	9919	Date Prepared:	2004-07-21	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		29300	μMHOS/cm	1	0.00

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	11217	Date Analyzed:	2004-07-21	Analyzed By:	JR
Prep Batch:	9919	Date Prepared:	2004-07-21	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		29400	μMHOS/cm	1	0.00

Method Blank (1) QC Batch: 10818

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Method Blank (1) QC Batch: 11113

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Method Blank (1) QC Batch: 11217

Parameter	Flag	Result	Units	RL
Specific Conductance		0.00	μMHOS/cm	

Duplicate (1) QC Batch: 10818

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	12400	12400	μMHOS/cm	1	1	6.7

Duplicate (1) QC Batch: 11113

continued . . .

duplicate continued . . .

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	13000	12900	μMHOS/cm	1	1	6.7

Duplicate (1) QC Batch: 11217

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	270	270	μMHOS/cm	1	0	6.7

Standard (ICV-1) QC Batch: 10818

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1430	102	90 - 110	2004-07-01

Standard (CCV-1) QC Batch: 10818

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1430	102	90 - 110	2004-07-01

Standard (ICV-1) QC Batch: 11113

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1400	99	90 - 110	2004-07-15

Standard (CCV-1) QC Batch: 11113

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1400	99	90 - 110	2004-07-15

Standard (ICV-1) QC Batch: 11217

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1390	99	90 - 110	2004-07-21

Standard (CCV-1) QC Batch: 11217

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1400	99	90 - 110	2004-07-21

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	10823	Date Analyzed:	2004-06-30	Analyzed By:	JR
Prep Batch:	9576	Date Prepared:	2004-06-30	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	10827	Date Analyzed:	2004-07-01	Analyzed By:	JR
Prep Batch:	9577	Date Prepared:	2004-07-01	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	10962	Date Analyzed:	2004-07-07	Analyzed By:	JR
Prep Batch:	9694	Date Prepared:	2004-07-07	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11210	Date Analyzed:	2004-07-20	Analyzed By:	JR
Prep Batch:	9907	Date Prepared:	2004-07-20	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11216	Date Analyzed:	2004-07-21	Analyzed By:	JR
Prep Batch:	9918	Date Prepared:	2004-07-21	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		1.41	mg/L	5	0.0100

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	11216	Date Analyzed:	2004-07-21	Analyzed By:	JR
Prep Batch:	9918	Date Prepared:	2004-07-21	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		1.40	mg/L	5	0.0100

Method Blank (1) QC Batch: 10823

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 10827

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 10962

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11210

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11216

Parameter	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.01

Laboratory Control Spike (LCS-1) QC Batch: 10823

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.492	0.507	mg/L	1	0.500	<0.00500	98	3	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 10827

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.492	0.492	mg/L	1	0.500	<0.00500	98	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 10962

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.502	0.499	mg/L	1	0.500	<0.00500	100	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11210

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.514	0.502	mg/L	1	0.500	<0.00500	103	2	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11216

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.501	0.504	mg/L	1	0.500	<0.00500	100	0	91.6 - 110	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10823

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.552	0.561	mg/L	1.11	0.500	<0.00555	99	2	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10827

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.560	0.561	mg/L	1.11	0.500	<0.00555	101	0	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10962

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.578	0.578	mg/L	1.11	0.500	<0.00555	104	0	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11210

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	0.568	0.573	mg/L	1.11	0.500	<0.00555	102	1	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11216

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Hexavalent Chromium	4.31	4.31	mg/L	5.56	0.500	1.41	104	0	77.4 - 123	24

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 10823

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.494	99	80 - 120	2004-06-30

Standard (CCV-1) QC Batch: 10823

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.489	98	80 - 120	2004-06-30

Standard (ICV-1) QC Batch: 10827

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.497	99	80 - 120	2004-07-01

Standard (CCV-1) QC Batch: 10827

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.501	100	80 - 120	2004-07-01

Standard (ICV-1) QC Batch: 10962

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.499	100	80 - 120	2004-07-07

Standard (CCV-1) QC Batch: 10962

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.502	100	80 - 120	2004-07-07

Standard (ICV-1) QC Batch: 11210

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.502	100	80 - 120	2004-07-20

Standard (CCV-1) QC Batch: 11210

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.507	101	80 - 120	2004-07-20

Standard (ICV-1) QC Batch: 11216

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.505	101	80 - 120	2004-07-21

Standard (CCV-1) QC Batch: 11216

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.500	100	80 - 120	2004-07-21

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 20 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	10971	Date Analyzed:	2004-07-11	Analyzed By:	RR
Prep Batch:	9608	Date Prepared:	2004-07-06	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		1.18	mg/L	1	0.00500
Dissolved Barium		0.0150	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.223	mg/L	1	0.0500
Dissolved Nickel		<0.00500	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		9.87	mg/L	1	0.00500
Dissolved Vanadium		0.0140	mg/L	1	0.00500
Dissolved Zinc		<0.0100	mg/L	1	0.0100
Dissolved Silica		49.2	mg/L	1	0.0500

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	10971	Date Analyzed:	2004-07-11	Analyzed By:	RR
Prep Batch:	9608	Date Prepared:	2004-07-06	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.14	mg/L	1	0.00500

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	10971	Date Analyzed:	2004-07-11	Analyzed By:	RR
Prep Batch:	9608	Date Prepared:	2004-07-06	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500

continued . . .

sample 37911 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		1.87	mg/L	1	0.00500
Dissolved Barium		0.0240	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		0.0280	mg/L	1	0.0250
Dissolved Molybdenum		0.198	mg/L	1	0.0500
Dissolved Nickel		<0.00500	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		8.79	mg/L	1	0.00500
Dissolved Vanadium		0.0230	mg/L	1	0.00500
Dissolved Zinc		<0.0100	mg/L	1	0.0100
Dissolved Silica		31.1	mg/L	1	0.0500

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	10971	Date Analyzed:	2004-07-11	Analyzed By:	RR
Prep Batch:	9608	Date Prepared:	2004-07-06	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.28	mg/L	1	0.00500

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11086	Date Analyzed:	2004-07-15	Analyzed By:	RR
Prep Batch:	9782	Date Prepared:	2004-07-14	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		1.43	mg/L	1	0.00500
Dissolved Barium		0.0140	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125

continued . . .

sample 38118 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.0810	mg/L	1	0.0500
Dissolved Nickel		0.00800	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		10.1	mg/L	1	0.00500
Dissolved Vanadium		0.0210	mg/L	1	0.00500
Dissolved Zinc		<0.0100	mg/L	1	0.0100
Dissolved Silica		41.9	mg/L	1	0.0500

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11086	Date Analyzed:	2004-07-15	Analyzed By:	RR
Prep Batch:	9782	Date Prepared:	2004-07-14	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		1.03	mg/L	1	0.00500

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11240	Date Analyzed:	2004-07-22	Analyzed By:	RR
Prep Batch:	9915	Date Prepared:	2004-07-21	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.0130	mg/L	1	0.0130
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.0100	mg/L	1	0.0100
Dissolved Boron		1.60	mg/L	1	0.0500
Dissolved Barium		<0.100	mg/L	1	0.100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00500	mg/L	1	0.00500
Dissolved Cobalt		<0.0250	mg/L	1	0.0250
Dissolved Chromium		<0.0100	mg/L	1	0.0100
Dissolved Copper		0.115	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		0.142	mg/L	1	0.0500
Dissolved Nickel		<0.0250	mg/L	1	0.0250
Dissolved Lead		<0.0100	mg/L	1	0.0100
Dissolved Selenium		<0.0500	mg/L	1	0.0500
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		8.17	mg/L	10	0.00500

continued . . .

sample 39196 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Vanadium		<0.0250	mg/L	1	0.0250
Dissolved Zinc		<0.0250	mg/L	1	0.0250
Dissolved Silica		25.8	mg/L	1	0.0500

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11240	Date Analyzed:	2004-07-22	Analyzed By:	RR
Prep Batch:	9915	Date Prepared:	2004-07-21	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		0.459	mg/L	1	0.00500

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		7.53	mg/L	1	0.00500
Dissolved Barium		0.0120	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		1.17	mg/L	1	0.00500
Dissolved Copper		0.0260	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		1.15	mg/L	1	0.0500
Dissolved Nickel		0.0100	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		0.559	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		9.63	mg/L	1	0.00500
Dissolved Vanadium		0.0320	mg/L	1	0.00500
Dissolved Zinc		<0.0100	mg/L	1	0.0100
Dissolved Silica		18.5	mg/L	1	0.0500

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A

QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		2.19	mg/L	1	0.00500

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00300	mg/L	1	0.00300
Dissolved Aluminum		<0.0500	mg/L	1	0.0500
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Boron		7.50	mg/L	1	0.00500
Dissolved Barium		0.0120	mg/L	1	0.0100
Dissolved Beryllium		<0.00250	mg/L	1	0.00250
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Cobalt		<0.00500	mg/L	1	0.00500
Dissolved Chromium		1.19	mg/L	1	0.00500
Dissolved Copper		0.0260	mg/L	1	0.0125
Dissolved Iron		<0.0500	mg/L	1	0.0500
Dissolved Manganese		<0.0250	mg/L	1	0.0250
Dissolved Molybdenum		1.13	mg/L	1	0.0500
Dissolved Nickel		<0.00500	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		0.581	mg/L	1	0.0100
Dissolved Tin		<0.0250	mg/L	1	0.0250
Dissolved Strontium		9.62	mg/L	1	0.00500
Dissolved Vanadium		0.0340	mg/L	1	0.00500
Dissolved Zinc		<0.0100	mg/L	1	0.0100
Dissolved Silica		18.5	mg/L	1	0.0500

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	Li, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	11448	Date Analyzed:	2004-07-29	Analyzed By:	RR
Prep Batch:	10096	Date Prepared:	2004-07-28	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lithium		2.20	mg/L	1	0.00500

Method Blank (1) QC Batch: 10971

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 10971

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.00300	mg/L	0.003
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.00500	mg/L	0.005
Dissolved Boron		<0.00500	mg/L	0.005
Dissolved Barium		<0.0100	mg/L	0.01
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00100	mg/L	0.001
Dissolved Cobalt		<0.00500	mg/L	0.005
Dissolved Chromium		<0.00500	mg/L	0.005
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.00500	mg/L	0.005
Dissolved Lead		<0.00500	mg/L	0.005
Dissolved Selenium		<0.0100	mg/L	0.01
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.00500	mg/L	0.005
Dissolved Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11086

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 11086

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.00300	mg/L	0.003
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.00500	mg/L	0.005
Dissolved Boron		<0.00500	mg/L	0.005
Dissolved Barium		<0.0100	mg/L	0.01
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00100	mg/L	0.001
Dissolved Cobalt		<0.00500	mg/L	0.005

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Dissolved Chromium		<0.00500	mg/L	0.005
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.00500	mg/L	0.005
Dissolved Lead		<0.00500	mg/L	0.005
Dissolved Selenium		<0.0100	mg/L	0.01
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.00500	mg/L	0.005
Dissolved Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11240

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 11240

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.0130	mg/L	0.013
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.0100	mg/L	0.01
Dissolved Boron		<0.0500	mg/L	0.05
Dissolved Barium		<0.100	mg/L	0.1
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00500	mg/L	0.005
Dissolved Cobalt		<0.0250	mg/L	0.025
Dissolved Chromium		<0.0100	mg/L	0.01
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.0250	mg/L	0.025
Dissolved Lead		<0.0100	mg/L	0.01
Dissolved Selenium		<0.0500	mg/L	0.05
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.0250	mg/L	0.025
Dissolved Zinc		<0.0250	mg/L	0.025

Method Blank (1) QC Batch: 11448

Parameter	Flag	Result	Units	RL
Dissolved Lithium		<0.00500	mg/L	0.005

Method Blank (1) QC Batch: 11448

Parameter	Flag	Result	Units	RL
Dissolved Silver		<0.00300	mg/L	0.003
Dissolved Aluminum		<0.0500	mg/L	0.05
Dissolved Arsenic		<0.00500	mg/L	0.005
Dissolved Boron		<0.00500	mg/L	0.005
Dissolved Barium		<0.0100	mg/L	0.01
Dissolved Beryllium		<0.00250	mg/L	0.0025
Dissolved Cadmium		<0.00100	mg/L	0.001
Dissolved Cobalt		<0.00500	mg/L	0.005
Dissolved Chromium		<0.00500	mg/L	0.005
Dissolved Copper		<0.0125	mg/L	0.0125
Dissolved Iron		<0.0500	mg/L	0.05
Dissolved Manganese		<0.0250	mg/L	0.025
Dissolved Molybdenum		<0.0500	mg/L	0.05
Dissolved Nickel		<0.00500	mg/L	0.005
Dissolved Lead		<0.00500	mg/L	0.005
Dissolved Selenium		<0.0100	mg/L	0.01
Dissolved Tin		<0.0250	mg/L	0.025
Dissolved Strontium		<0.00500	mg/L	0.005
Dissolved Vanadium		<0.00500	mg/L	0.005
Dissolved Zinc		<0.0100	mg/L	0.01

Laboratory Control Spike (LCS-1) QC Batch: 10971

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0510	0.0560	mg/L	1	0.0500	<0.000188	102	9	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 10971

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.125	0.126	mg/L	1	0.125	<0.00274	100	1	85 - 115	20
Dissolved Aluminum	0.953	0.937	mg/L	1	1.00	<0.0133	95	2	85 - 115	20
Dissolved Arsenic	0.507	0.501	mg/L	1	0.500	<0.00489	101	1	85 - 115	20
Dissolved Boron	0.0550	0.0560	mg/L	1	0.0500	<0.00544	110	2	85 - 115	20
Dissolved Barium	0.971	0.955	mg/L	1	1.00	<0.000450	97	2	85 - 114	20
Dissolved Beryllium	0.0270	0.0270	mg/L	1	0.0250	<0.000178	108	0	85 - 115	20
Dissolved Cadmium	0.245	0.239	mg/L	1	0.250	<0.00181	98	2	86 - 115	20
Dissolved Cobalt	0.257	0.255	mg/L	1	0.250	<0.00293	103	1	87 - 113	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Chromium	0.0970	0.0970	mg/L	1	0.100	<0.00357	97	0	85 - 115	20
Dissolved Copper	0.141	0.137	mg/L	1	0.125	<0.00127	113	3	85 - 113	20
Dissolved Iron	0.452	0.446	mg/L	1	0.500	<0.0103	90	1	85 - 115	20
Dissolved Manganese	0.250	0.246	mg/L	1	0.250	<0.000297	100	2	85 - 110	20
Dissolved Molybdenum	0.507	0.500	mg/L	1	0.500	<0.00690	101	1	85 - 115	20
Dissolved Nickel	0.255	0.254	mg/L	1	0.250	<0.000450	102	0	85 - 112	20
Dissolved Lead	0.447	0.485	mg/L	1	0.500	<0.00698	89	8	86.1 - 112	20
Dissolved Selenium	0.563	0.520	mg/L	1	0.500	<0.00556	113	8	75 - 125	20
Dissolved Tin	0.324	0.283	mg/L	1	0.300	<0.00759	108	14	85 - 115	20
Dissolved Strontium	0.0480	0.0470	mg/L	1	0.0500	<0.000281	96	2	85 - 115	20
Dissolved Vanadium	0.257	0.254	mg/L	1	0.250	<0.00105	103	1	85 - 115	20
Dissolved Zinc	0.259	0.253	mg/L	1	0.250	<0.00300	104	2	85 - 115	20
Dissolved Silica	0.520	0.500	mg/L	1	0.500	<0.00490	104	4	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11086

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0540	0.0540	mg/L	1	0.0500	<0.000188	108	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11086

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.118	0.119	mg/L	1	0.125	<0.00274	94	1	85 - 115	20
Dissolved Aluminum	0.943	0.942	mg/L	1	1.00	<0.0133	94	0	85 - 115	20
Dissolved Arsenic	0.468	0.448	mg/L	1	0.500	<0.00489	94	4	85 - 115	20
Dissolved Boron	0.0480	0.0460	mg/L	1	0.0500	<0.00544	96	4	85 - 115	20
Dissolved Barium	0.991	0.980	mg/L	1	1.00	<0.000450	99	1	85 - 114	20
Dissolved Beryllium	0.0220	0.0220	mg/L	1	0.0250	<0.000178	88	0	85 - 115	20
Dissolved Cadmium	0.225	0.223	mg/L	1	0.250	<0.00181	90	1	86 - 115	20
Dissolved Cobalt	0.232	0.229	mg/L	1	0.250	<0.00293	93	1	87 - 113	20
Dissolved Chromium	0.0970	0.0960	mg/L	1	0.100	<0.00357	97	1	85 - 115	20
Dissolved Copper	0.122	0.122	mg/L	1	0.125	<0.00127	98	0	85 - 113	20
Dissolved Iron	0.466	0.464	mg/L	1	0.500	<0.0103	93	0	85 - 115	20
Dissolved Manganese	0.244	0.243	mg/L	1	0.250	<0.000297	98	0	85 - 110	20
Dissolved Molybdenum	0.480	0.474	mg/L	1	0.500	<0.00690	96	1	85 - 115	20
Dissolved Nickel	0.247	0.244	mg/L	1	0.250	<0.000450	99	1	85 - 112	20
Dissolved Lead	0.461	0.462	mg/L	1	0.500	<0.00698	92	0	86.1 - 112	20
Dissolved Selenium	0.394	0.398	mg/L	1	0.500	<0.00556	79	1	75 - 125	20
Dissolved Tin	0.297	0.284	mg/L	1	0.300	<0.00759	99	4	85 - 115	20
Dissolved Strontium	0.0470	0.0460	mg/L	1	0.0500	<0.000281	94	2	85 - 115	20
Dissolved Vanadium	0.248	0.241	mg/L	1	0.250	<0.00105	99	3	85 - 115	20
Dissolved Zinc	0.236	0.235	mg/L	1	0.250	<0.00300	94	0	85 - 115	20
Dissolved Silica	0.445	0.480	mg/L	1	0.500	<0.00490	89	8	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11240

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0540	0.0540	mg/L	1	0.0500	<0.00197	108	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11240

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.129	0.129	mg/L	1	0.125	<0.000199	103	0	85 - 115	20
Dissolved Aluminum	0.996	0.995	mg/L	1	1.00	<0.00984	100	0	85 - 115	20
Dissolved Arsenic	0.485	0.479	mg/L	1	0.500	<0.00860	97	1	85 - 115	20
Dissolved Boron	0.0460	0.0440	mg/L	1	0.0500	<0.00366	92	4	85 - 115	20
Dissolved Barium	1.05	1.05	mg/L	1	1.00	<0.000984	105	0	85 - 115	20
Dissolved Beryllium	0.0260	0.0260	mg/L	1	0.0250	<0.000532	104	0	85 - 115	20
Dissolved Cadmium	0.252	0.252	mg/L	1	0.250	<0.000577	101	0	85 - 115	20
Dissolved Cobalt	0.264	0.264	mg/L	1	0.250	<0.000630	106	0	85 - 115	20
Dissolved Chromium	0.107	0.107	mg/L	1	0.100	<0.000437	107	0	85 - 115	20
Dissolved Copper	0.130	0.131	mg/L	1	0.125	<0.00164	104	1	85 - 115	20
Dissolved Iron	0.492	0.491	mg/L	1	0.500	<0.00281	98	0	85 - 115	20
Dissolved Manganese	0.258	0.257	mg/L	1	0.250	<0.00296	103	0	85 - 115	20
Dissolved Molybdenum	0.522	0.521	mg/L	1	0.500	<0.00118	104	0	85 - 115	20
Dissolved Nickel	0.256	0.254	mg/L	1	0.250	<0.00126	102	1	85 - 115	20
Dissolved Lead	0.519	0.518	mg/L	1	0.500	<0.00310	104	0	85 - 115	20
Dissolved Selenium	0.467	0.468	mg/L	1	0.500	<0.00370	93	0	75 - 125	20
Dissolved Tin	0.309	0.307	mg/L	1	0.300	<0.00238	103	1	85 - 115	20
Dissolved Strontium	0.0520	0.0520	mg/L	1	0.0500	<0.000457	104	0	85 - 115	20
Dissolved Vanadium	0.261	0.260	mg/L	1	0.250	<0.000651	104	0	85 - 115	20
Dissolved Zinc	0.255	0.256	mg/L	1	0.250	<0.00151	102	0	85 - 115	20
Dissolved Silica	0.448	0.448	mg/L	1	0.500	<0.00632	90	0	85 - 115	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11448

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0490	0.0490	mg/L	1	0.0500	<0.000188	98	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11448

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.128	0.126	mg/L	1	0.125	<0.00274	102	2	85 - 115	20
Dissolved Aluminum	0.964	0.947	mg/L	1	1.00	<0.0133	96	2	85 - 115	20
Dissolved Arsenic	0.495	0.504	mg/L	1	0.500	<0.00489	99	2	85 - 115	20
Dissolved Boron	0.0510	0.0510	mg/L	1	0.0500	<0.00544	102	0	85 - 115	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Barium	0.998	1.01	mg/L	1	1.00	<0.000450	100	1	85 - 114	20
Dissolved Beryllium	0.0253	0.0259	mg/L	1	0.0250	<0.000178	101	2	85 - 115	20
Dissolved Cadmium	0.243	0.241	mg/L	1	0.250	<0.00181	97	1	86 - 115	20
Dissolved Cobalt	0.261	0.259	mg/L	1	0.250	<0.00293	104	1	87 - 113	20
Dissolved Chromium	0.103	0.103	mg/L	1	0.100	<0.00357	103	0	85 - 115	20
Dissolved Copper	0.138	0.141	mg/L	1	0.125	<0.00127	110	2	85 - 113	20
Dissolved Iron	0.489	0.486	mg/L	1	0.500	<0.0103	98	1	85 - 115	20
Dissolved Manganese	0.257	0.257	mg/L	1	0.250	<0.000297	103	0	85 - 110	20
Dissolved Molybdenum	0.538	0.526	mg/L	1	0.500	<0.00690	108	2	85 - 115	20
Dissolved Nickel	0.276	0.276	mg/L	1	0.250	<0.000450	110	0	85 - 112	20
Dissolved Lead	0.519	0.498	mg/L	1	0.500	<0.00698	104	4	86.1 - 112	20
Dissolved Selenium	0.436	0.469	mg/L	1	0.500	<0.00556	87	7	75 - 125	20
Dissolved Tin	0.293	0.261	mg/L	1	0.300	<0.00759	98	12	85 - 115	20
Dissolved Strontium	0.0480	0.0480	mg/L	1	0.0500	<0.000281	96	0	85 - 115	20
Dissolved Vanadium	0.257	0.257	mg/L	1	0.250	<0.00105	103	0	85 - 115	20
Dissolved Zinc	0.258	0.256	mg/L	1	0.250	<0.00300	103	1	85 - 115	20
Dissolved Silica	0.459	0.453	mg/L	1	0.500	<0.00490	92	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10971

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0580	0.0590	mg/L	1	0.0500	<0.000188	116	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10971

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.138	0.139	mg/L	1	0.125	<0.00274	110	1	75 - 125	20
Dissolved Aluminum	1.08	1.06	mg/L	1	1.00	<0.0133	108	2	75 - 125	20
Dissolved Arsenic	0.497	0.506	mg/L	1	0.500	<0.00489	99	2	75 - 125	20
Dissolved Boron	0.0500	0.0480	mg/L	1	0.0500	<0.00544	100	4	75 - 125	20
Dissolved Barium	1.12	1.08	mg/L	1	1.00	<0.000450	112	4	75 - 125	20
Dissolved Beryllium	0.0280	0.0280	mg/L	1	0.0250	<0.000178	112	0	75 - 125	20
Dissolved Cadmium	0.261	0.258	mg/L	1	0.250	<0.00181	104	1	75 - 125	20
Dissolved Cobalt	0.272	0.275	mg/L	1	0.250	<0.00293	109	1	75 - 125	20
Dissolved Chromium	0.104	0.105	mg/L	1	0.100	<0.00357	104	1	75 - 125	20
Dissolved Copper	0.121	0.123	mg/L	1	0.125	<0.00127	97	2	75 - 125	20
Dissolved Iron	0.504	0.498	mg/L	1	0.500	<0.0103	101	1	75 - 125	20
Dissolved Manganese	0.272	0.272	mg/L	1	0.250	<0.000297	109	0	75 - 125	20
Dissolved Molybdenum	0.530	0.551	mg/L	1	0.500	<0.00690	106	4	75 - 125	20
Dissolved Nickel	0.282	0.292	mg/L	1	0.250	<0.000450	113	3	75 - 125	20
Dissolved Lead	0.535	0.530	mg/L	1	0.500	<0.00698	107	1	75 - 125	20
Dissolved Selenium	0.550	0.544	mg/L	1	0.500	<0.00556	110	1	75 - 125	20
Dissolved Tin	0.333	0.333	mg/L	1	0.300	<0.00759	111	0	75 - 125	20
Dissolved Strontium	0.0520	0.0540	mg/L	1	0.0500	<0.000281	104	4	75 - 125	20

continued . . .

matrix spikes continued . . .

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Vanadium	0.254	0.257	mg/L	1	0.250	<0.00105	102	1	75 - 125	20
Dissolved Zinc	0.256	0.255	mg/L	1	0.250	<0.00300	102	0	75 - 125	20
Dissolved Silica	0.501	0.505	mg/L	1	0.500	<0.00490	100	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11086

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0500	0.0480	mg/L	1	0.0500	<0.000188	100	4	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11086

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.134	0.131	mg/L	1	0.125	<0.00274	107	2	75 - 125	20
Dissolved Aluminum	1.02	1.06	mg/L	1	1.00	<0.0133	102	4	75 - 125	20
Dissolved Arsenic	0.443	0.450	mg/L	1	0.500	<0.00489	89	2	75 - 125	20
Dissolved Boron	0.0500	0.0520	mg/L	1	0.0500	<0.00544	100	4	75 - 125	20
Dissolved Barium	1.13	1.02	mg/L	1	1.00	<0.000450	113	10	75 - 125	20
Dissolved Beryllium	0.0230	0.0230	mg/L	1	0.0250	<0.000178	92	0	75 - 125	20
Dissolved Cadmium	0.228	0.226	mg/L	1	0.250	<0.00181	91	1	75 - 125	20
Dissolved Cobalt	0.259	0.255	mg/L	1	0.250	<0.00293	104	2	75 - 125	20
Dissolved Chromium	0.0970	0.0960	mg/L	1	0.100	<0.00357	97	1	75 - 125	20
Dissolved Copper	0.130	0.132	mg/L	1	0.125	<0.00127	104	2	75 - 125	20
Dissolved Iron	0.486	0.483	mg/L	1	0.500	<0.0103	97	1	75 - 125	20
Dissolved Manganese	0.254	0.250	mg/L	1	0.250	<0.000297	102	2	75 - 125	20
Dissolved Molybdenum	0.505	0.501	mg/L	1	0.500	<0.00690	101	1	75 - 125	20
Dissolved Nickel	0.257	0.257	mg/L	1	0.250	<0.000450	103	0	75 - 125	20
Dissolved Lead	0.582	0.584	mg/L	1	0.500	<0.00698	116	0	75 - 125	20
Dissolved Selenium	0.518	0.450	mg/L	1	0.500	<0.00556	104	14	75 - 125	20
Dissolved Tin	0.320	0.302	mg/L	1	0.300	<0.00759	107	6	75 - 125	20
Dissolved Strontium	0.0500	0.0480	mg/L	1	0.0500	<0.000281	100	4	75 - 125	20
Dissolved Vanadium	0.246	0.262	mg/L	1	0.250	<0.00105	98	6	75 - 125	20
Dissolved Zinc	0.261	0.258	mg/L	1	0.250	<0.00300	104	1	75 - 125	20
Dissolved Silica	0.520	0.512	mg/L	1	0.500	<0.00490	104	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11240

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0530	0.0510	mg/L	1	0.0500	<0.00197	106	4	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11240

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.132	0.129	mg/L	1	0.125	<0.000199	106	2	75 - 125	20
Dissolved Aluminum	1.06	1.10	mg/L	1	1.00	<0.00984	106	4	75 - 125	20
Dissolved Arsenic	0.510	0.486	mg/L	1	0.500	<0.00860	102	5	75 - 125	20
Dissolved Boron	0.0530	0.0530	mg/L	1	0.0500	<0.00366	106	0	75 - 125	20
Dissolved Barium	1.02	0.967	mg/L	1	1.00	<0.000984	102	5	75 - 125	20
Dissolved Beryllium	0.0246	0.0246	mg/L	1	0.0250	<0.000532	98	0	75 - 125	20
Dissolved Cadmium	0.250	0.227	mg/L	1	0.250	<0.000577	100	10	75 - 125	20
Dissolved Cobalt	0.257	0.235	mg/L	1	0.250	<0.000630	103	9	75 - 125	20
Dissolved Chromium	0.107	0.0970	mg/L	1	0.100	<0.000437	107	10	75 - 125	20
Dissolved Copper	0.133	0.129	mg/L	1	0.125	<0.00164	106	3	75 - 125	20
Dissolved Iron	0.482	0.468	mg/L	1	0.500	<0.00281	96	3	75 - 125	20
Dissolved Manganese	0.252	0.231	mg/L	1	0.250	<0.00296	101	9	75 - 125	20
Dissolved Molybdenum	0.524	0.484	mg/L	1	0.500	<0.00118	105	8	75 - 125	20
Dissolved Nickel	0.247	0.222	mg/L	1	0.250	<0.00126	99	11	75 - 125	20
Dissolved Lead	0.495	0.462	mg/L	1	0.500	<0.00310	99	7	75 - 125	20
Dissolved Selenium	0.501	0.508	mg/L	1	0.500	<0.00370	100	1	75 - 125	20
Dissolved Tin	0.306	0.275	mg/L	1	0.300	<0.00238	102	11	75 - 125	20
Dissolved Strontium	0.0550	0.0480	mg/L	1	0.0500	<0.000457	110	14	75 - 125	20
Dissolved Vanadium	0.261	0.235	mg/L	1	0.250	<0.000651	104	10	75 - 125	20
Dissolved Zinc	0.257	0.231	mg/L	1	0.250	<0.00151	103	11	75 - 125	20
Dissolved Silica	0.506	0.551	mg/L	1	0.500	<0.00632	101	8	75 - 125	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11448

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Lithium	0.0510	0.0520	mg/L	1	0.0500	<0.000188	102	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11448

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Silver	0.135	0.135	mg/L	1	0.125	<0.00274	108	0	75 - 125	20
Dissolved Aluminum	0.956	0.961	mg/L	1	1.00	<0.0133	96	0	75 - 125	20
Dissolved Arsenic	0.492	0.483	mg/L	1	0.500	<0.00489	98	2	75 - 125	20
Dissolved Boron	0.0500	0.0510	mg/L	1	0.0500	<0.00544	100	2	75 - 125	20
Dissolved Barium	1.07	1.06	mg/L	1	1.00	<0.000450	107	1	75 - 125	20
Dissolved Beryllium	0.0245	0.0250	mg/L	1	0.0250	<0.000178	98	2	75 - 125	20
Dissolved Cadmium	0.257	0.256	mg/L	1	0.250	<0.00181	103	0	75 - 125	20
Dissolved Cobalt	0.247	0.250	mg/L	1	0.250	<0.00293	99	1	75 - 125	20
Dissolved Chromium	0.109	0.108	mg/L	1	0.100	<0.00357	109	1	75 - 125	20
Dissolved Copper	0.138	0.134	mg/L	1	0.125	<0.00127	110	3	75 - 125	20
Dissolved Iron	0.528	0.533	mg/L	1	0.500	<0.0103	106	1	75 - 125	20
Dissolved Manganese	0.276	0.276	mg/L	1	0.250	<0.000297	110	0	75 - 125	20
Dissolved Molybdenum	0.551	0.545	mg/L	1	0.500	<0.00690	110	1	75 - 125	20
Dissolved Nickel	0.302	0.292	mg/L	1	0.250	<0.000450	121	3	75 - 125	20
Dissolved Lead	0.472	0.467	mg/L	1	0.500	<0.00698	94	1	75 - 125	20

continued . . .

matrix spikes continued . . .

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Selenium	0.519	0.516	mg/L	1	0.500	<0.00556	104	0	75 - 125	20
Dissolved Tin	0.320	0.296	mg/L	1	0.300	<0.00759	107	8	75 - 125	20
Dissolved Strontium	0.0450	0.0470	mg/L	1	0.0500	<0.000281	90	4	75 - 125	20
Dissolved Vanadium	0.257	0.259	mg/L	1	0.250	<0.00105	103	1	75 - 125	20
Dissolved Zinc	0.256	0.254	mg/L	1	0.250	<0.00300	102	1	75 - 125	20
Dissolved Silica	0.571	0.551	mg/L	1	0.500	<0.00490	114	4	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 10971

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.972	97	90 - 110	2004-07-11

Standard (ICV-1) QC Batch: 10971

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.122	98	90 - 110	2004-07-11
Dissolved Aluminum		mg/L	1.00	0.945	94	90 - 110	2004-07-11
Dissolved Arsenic		mg/L	1.00	1.00	100	90 - 110	2004-07-11
Dissolved Boron		mg/L	1.00	1.03	103	90 - 110	2004-07-11
Dissolved Barium		mg/L	1.00	0.952	95	90 - 110	2004-07-11
Dissolved Beryllium		mg/L	1.00	1.04	104	90 - 110	2004-07-11
Dissolved Cadmium		mg/L	1.00	0.985	98	95 - 105	2004-07-11
Dissolved Cobalt		mg/L	1.00	0.965	96	90 - 110	2004-07-11
Dissolved Chromium		mg/L	1.00	1.00	100	90 - 110	2004-07-11
Dissolved Copper		mg/L	1.00	0.988	99	90 - 110	2004-07-11
Dissolved Iron		mg/L	1.00	0.970	97	90 - 110	2004-07-11
Dissolved Manganese		mg/L	1.00	0.952	95	90 - 110	2004-07-11
Dissolved Molybdenum		mg/L	1.00	1.03	103	90 - 110	2004-07-11
Dissolved Nickel		mg/L	1.00	0.961	96	90 - 110	2004-07-11
Dissolved Lead		mg/L	1.00	0.949	95	90 - 110	2004-07-11
Dissolved Selenium		mg/L	1.00	0.962	96	95 - 105	2004-07-11
Dissolved Tin		mg/L	1.00	0.996	100	90 - 110	2004-07-11
Dissolved Strontium		mg/L	1.00	0.955	96	95 - 105	2004-07-11
Dissolved Vanadium		mg/L	1.00	0.966	97	95 - 105	2004-07-11
Dissolved Zinc		mg/L	1.00	0.988	99	90 - 110	2004-07-11
Dissolved Silica		mg/L	5.00	5.11	102	95 - 105	2004-07-11

Standard (CCV-1) QC Batch: 10971

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.945	94	90 - 110	2004-07-11

Standard (CCV-1) QC Batch: 10971

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.119	95	90 - 110	2004-07-11
Dissolved Aluminum		mg/L	1.00	0.921	92	90 - 110	2004-07-11
Dissolved Arsenic		mg/L	1.00	0.983	98	90 - 110	2004-07-11
Dissolved Boron		mg/L	1.00	0.990	99	90 - 110	2004-07-11
Dissolved Barium		mg/L	1.00	0.931	93	90 - 110	2004-07-11
Dissolved Beryllium		mg/L	1.00	0.962	96	90 - 110	2004-07-11
Dissolved Cadmium		mg/L	1.00	0.925	92	90 - 110	2004-07-11
Dissolved Cobalt		mg/L	1.00	0.922	92	90 - 110	2004-07-11
Dissolved Chromium		mg/L	1.00	0.993	99	90 - 110	2004-07-11
Dissolved Copper		mg/L	1.00	0.952	95	90 - 110	2004-07-11
Dissolved Iron		mg/L	1.00	0.922	92	90 - 110	2004-07-11
Dissolved Manganese		mg/L	1.00	0.935	94	90 - 110	2004-07-11
Dissolved Molybdenum		mg/L	1.00	0.928	93	90 - 110	2004-07-11
Dissolved Nickel		mg/L	1.00	0.921	92	90 - 110	2004-07-11
Dissolved Lead		mg/L	1.00	0.920	92	90 - 110	2004-07-11
Dissolved Selenium		mg/L	1.00	0.939	94	90 - 110	2004-07-11
Dissolved Tin		mg/L	1.00	0.946	95	90 - 110	2004-07-11
Dissolved Strontium		mg/L	1.00	0.940	94	90 - 110	2004-07-11
Dissolved Vanadium		mg/L	1.00	0.958	96	90 - 110	2004-07-11
Dissolved Zinc		mg/L	1.00	0.942	94	90 - 110	2004-07-11
Dissolved Silica		mg/L	5.00	4.83	97	90 - 110	2004-07-11

Standard (ICV-1) QC Batch: 11086

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.989	99	90 - 110	2004-07-15

Standard (ICV-1) QC Batch: 11086

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.118	94	90 - 110	2004-07-15
Dissolved Aluminum		mg/L	1.00	0.995	100	90 - 110	2004-07-15
Dissolved Arsenic		mg/L	1.00	0.948	95	90 - 110	2004-07-15
Dissolved Boron		mg/L	1.00	0.957	96	90 - 110	2004-07-15
Dissolved Barium		mg/L	1.00	0.990	99	90 - 110	2004-07-15
Dissolved Beryllium		mg/L	1.00	0.958	96	90 - 110	2004-07-15
Dissolved Cadmium		mg/L	1.00	0.951	95	95 - 105	2004-07-15
Dissolved Cobalt		mg/L	1.00	0.952	95	90 - 110	2004-07-15
Dissolved Chromium		mg/L	1.00	0.954	95	90 - 110	2004-07-15
Dissolved Copper		mg/L	1.00	0.977	98	90 - 110	2004-07-15
Dissolved Iron		mg/L	1.00	0.970	97	90 - 110	2004-07-15
Dissolved Manganese		mg/L	1.00	0.958	96	90 - 110	2004-07-15
Dissolved Molybdenum		mg/L	1.00	0.999	100	90 - 110	2004-07-15
Dissolved Nickel		mg/L	1.00	0.940	94	90 - 110	2004-07-15

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lead		mg/L	1.00	0.951	95	90 - 110	2004-07-15
Dissolved Selenium		mg/L	1.00	0.958	96	95 - 105	2004-07-15
Dissolved Tin		mg/L	1.00	0.973	97	90 - 110	2004-07-15
Dissolved Strontium		mg/L	1.00	0.961	96	95 - 105	2004-07-15
Dissolved Vanadium		mg/L	1.00	0.973	97	95 - 105	2004-07-15
Dissolved Zinc		mg/L	1.00	0.989	99	90 - 110	2004-07-15
Dissolved Silica		mg/L	5.00	4.86	97	95 - 105	2004-07-15

Standard (CCV-1) QC Batch: 11086

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.979	98	90 - 110	2004-07-15

Standard (CCV-1) QC Batch: 11086

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.118	94	90 - 110	2004-07-15
Dissolved Aluminum		mg/L	1.00	0.972	97	90 - 110	2004-07-15
Dissolved Arsenic		mg/L	1.00	0.935	94	90 - 110	2004-07-15
Dissolved Boron		mg/L	1.00	0.945	94	90 - 110	2004-07-15
Dissolved Barium		mg/L	1.00	0.962	96	90 - 110	2004-07-15
Dissolved Beryllium		mg/L	1.00	0.946	95	90 - 110	2004-07-15
Dissolved Cadmium		mg/L	1.00	0.926	93	90 - 110	2004-07-15
Dissolved Cobalt		mg/L	1.00	0.932	93	90 - 110	2004-07-15
Dissolved Chromium		mg/L	1.00	0.939	94	90 - 110	2004-07-15
Dissolved Copper		mg/L	1.00	0.963	96	90 - 110	2004-07-15
Dissolved Iron		mg/L	1.00	0.949	95	90 - 110	2004-07-15
Dissolved Manganese		mg/L	1.00	0.934	93	90 - 110	2004-07-15
Dissolved Molybdenum		mg/L	1.00	0.956	96	90 - 110	2004-07-15
Dissolved Nickel		mg/L	1.00	0.922	92	90 - 110	2004-07-15
Dissolved Lead		mg/L	1.00	0.933	93	90 - 110	2004-07-15
Dissolved Selenium		mg/L	1.00	0.920	92	90 - 110	2004-07-15
Dissolved Tin		mg/L	1.00	0.941	94	90 - 110	2004-07-15
Dissolved Strontium		mg/L	1.00	0.934	93	90 - 110	2004-07-15
Dissolved Vanadium		mg/L	1.00	0.953	95	90 - 110	2004-07-15
Dissolved Zinc		mg/L	1.00	0.963	96	90 - 110	2004-07-15
Dissolved Silica		mg/L	5.00	4.79	96	90 - 110	2004-07-15

Standard (ICV-1) QC Batch: 11240

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.01	101	90 - 110	2004-07-22

Standard (ICV-1) QC Batch: 11240

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.126	101	90 - 110	2004-07-22
Dissolved Aluminum		mg/L	1.00	1.00	100	90 - 110	2004-07-22
Dissolved Arsenic		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Boron		mg/L	1.00	1.05	105	90 - 110	2004-07-22
Dissolved Barium		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Beryllium		mg/L	1.00	0.982	98	90 - 110	2004-07-22
Dissolved Cadmium		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Cobalt		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Chromium		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Copper		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Iron		mg/L	1.00	1.00	100	90 - 110	2004-07-22
Dissolved Manganese		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Nickel		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Lead		mg/L	1.00	1.02	102	90 - 110	2004-07-22
Dissolved Selenium		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Tin		mg/L	1.00	1.02	102	90 - 110	2004-07-22
Dissolved Strontium		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Vanadium		mg/L	1.00	1.00	100	90 - 110	2004-07-22
Dissolved Zinc		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Silica		mg/L	5.00	4.93	99	95 - 105	2004-07-22

Standard (CCV-1) QC Batch: 11240

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	1.04	104	90 - 110	2004-07-22

Standard (CCV-1) QC Batch: 11240

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.129	103	90 - 110	2004-07-22
Dissolved Aluminum		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Arsenic		mg/L	1.00	1.02	102	90 - 110	2004-07-22
Dissolved Boron		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Barium		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Beryllium		mg/L	1.00	1.02	102	90 - 110	2004-07-22
Dissolved Cadmium		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Cobalt		mg/L	1.00	1.02	102	90 - 110	2004-07-22
Dissolved Chromium		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Copper		mg/L	1.00	1.04	104	90 - 110	2004-07-22
Dissolved Iron		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Manganese		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-07-22
Dissolved Nickel		mg/L	1.00	1.03	103	90 - 110	2004-07-22

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lead		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Selenium		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Tin		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Strontium		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Vanadium		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Zinc		mg/L	1.00	1.03	103	90 - 110	2004-07-22
Dissolved Silica		mg/L	5.00	5.13	103	90 - 110	2004-07-22

Standard (ICV-1) QC Batch: 11448

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.964	96	90 - 110	2004-07-29

Standard (ICV-1) QC Batch: 11448

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.118	94	90 - 110	2004-07-29
Dissolved Aluminum		mg/L	1.00	0.955	96	90 - 110	2004-07-29
Dissolved Arsenic		mg/L	1.00	0.961	96	90 - 110	2004-07-29
Dissolved Boron		mg/L	1.00	0.977	98	90 - 110	2004-07-29
Dissolved Barium		mg/L	1.00	0.950	95	90 - 110	2004-07-29
Dissolved Beryllium		mg/L	1.00	0.965	96	90 - 110	2004-07-29
Dissolved Cadmium		mg/L	1.00	0.955	96	95 - 105	2004-07-29
Dissolved Cobalt		mg/L	1.00	0.932	93	90 - 110	2004-07-29
Dissolved Chromium		mg/L	1.00	0.966	97	90 - 110	2004-07-29
Dissolved Copper		mg/L	1.00	0.975	98	90 - 110	2004-07-29
Dissolved Iron		mg/L	1.00	0.957	96	90 - 110	2004-07-29
Dissolved Manganese		mg/L	1.00	0.940	94	90 - 110	2004-07-29
Dissolved Molybdenum		mg/L	1.00	0.995	100	90 - 110	2004-07-29
Dissolved Nickel		mg/L	1.00	0.935	94	90 - 110	2004-07-29
Dissolved Lead		mg/L	1.00	0.955	96	90 - 110	2004-07-29
Dissolved Selenium		mg/L	1.00	0.957	96	95 - 105	2004-07-29
Dissolved Tin		mg/L	1.00	0.921	92	90 - 110	2004-07-29
Dissolved Strontium		mg/L	1.00	0.958	96	95 - 105	2004-07-29
Dissolved Vanadium		mg/L	1.00	0.985	98	95 - 105	2004-07-29
Dissolved Zinc		mg/L	1.00	0.948	95	90 - 110	2004-07-29
Dissolved Silica		mg/L	5.00	4.94	99	95 - 105	2004-07-29

Standard (CCV-1) QC Batch: 11448

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lithium		mg/L	1.00	0.975	98	90 - 110	2004-07-29

Standard (CCV-1) QC Batch: 11448

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.121	97	90 - 110	2004-07-29
Dissolved Aluminum		mg/L	1.00	0.950	95	90 - 110	2004-07-29
Dissolved Arsenic		mg/L	1.00	0.982	98	90 - 110	2004-07-29
Dissolved Boron		mg/L	1.00	0.987	99	90 - 110	2004-07-29
Dissolved Barium		mg/L	1.00	0.982	98	90 - 110	2004-07-29
Dissolved Beryllium		mg/L	1.00	0.980	98	90 - 110	2004-07-29
Dissolved Cadmium		mg/L	1.00	0.991	99	90 - 110	2004-07-29
Dissolved Cobalt		mg/L	1.00	0.984	98	90 - 110	2004-07-29
Dissolved Chromium		mg/L	1.00	1.00	100	90 - 110	2004-07-29
Dissolved Copper		mg/L	1.00	0.972	97	90 - 110	2004-07-29
Dissolved Iron		mg/L	1.00	0.990	99	90 - 110	2004-07-29
Dissolved Manganese		mg/L	1.00	0.979	98	90 - 110	2004-07-29
Dissolved Molybdenum		mg/L	1.00	1.03	103	90 - 110	2004-07-29
Dissolved Nickel		mg/L	1.00	0.978	98	90 - 110	2004-07-29
Dissolved Lead		mg/L	1.00	0.997	100	90 - 110	2004-07-29
Dissolved Selenium		mg/L	1.00	0.965	96	90 - 110	2004-07-29
Dissolved Tin		mg/L	1.00	0.937	94	90 - 110	2004-07-29
Dissolved Strontium		mg/L	1.00	0.983	98	90 - 110	2004-07-29
Dissolved Vanadium		mg/L	1.00	0.968	97	90 - 110	2004-07-29
Dissolved Zinc		mg/L	1.00	0.970	97	90 - 110	2004-07-29
Dissolved Silica		mg/L	5.00	4.93	99	90 - 110	2004-07-29

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	10864	Date Analyzed:	2004-07-03	Analyzed By:	BP
Prep Batch:	9607	Date Prepared:	2004-07-02	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.6	mg/L	0.1	150	91	81.8 - 161

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	10864	Date Analyzed:	2004-07-03	Analyzed By:	BP
Prep Batch:	9607	Date Prepared:	2004-07-02	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.2	mg/L	0.1	150	101	81.8 - 161

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	10997	Date Analyzed:	2004-07-12	Analyzed By:	BP
Prep Batch:	9720	Date Prepared:	2004-07-12	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		21.9	mg/L	0.1	150	146	70 - 150

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11249	Date Analyzed:	2004-07-21	Analyzed By:	BP
Prep Batch:	9937	Date Prepared:	2004-07-21	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.3	mg/L	0.1	150	102	81.8 - 161

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11327	Date Analyzed:	2004-07-24	Analyzed By:	BP
Prep Batch:	10010	Date Prepared:	2004-07-23	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[1]	11.8	mg/L	0.1	150	79	81.8 - 161

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	11327	Date Analyzed:	2004-07-24	Analyzed By:	BP
Prep Batch:	10010	Date Prepared:	2004-07-23	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	0.1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[2]	11.9	mg/L	0.1	150	79	81.8 - 161

Method Blank (1) QC Batch: 10864

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.9	mg/L	0.1	150	93	81.8 - 161

Method Blank (1) QC Batch: 10997

[1]Surrogate recovery out of range. QC show the process within control.
[2]Surrogate recovery out of range. QC show the process within control.

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[3]	23.5	mg/L	0.1	150	157	70 - 150

Method Blank (1) QC Batch: 11249

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.1	mg/L	0.1	150	94	81.8 - 161

Method Blank (1) QC Batch: 11327

Parameter	Flag	Result	Units	RL
DRO		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.7	mg/L	0.1	150	85	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 10864

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	31.0	32.8	mg/L	0.1	250	<0.538	124	6	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	15.3	14.7	mg/L	0.1	150	102	98	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 10997

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	27.7	29.1	mg/L	0.1	250	<1.78	111	5	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[3]Surrogate recovery out of range. QC show the process within control.

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	[4][5]	22.7	24.5	mg/L	0.1	150	151	163	70 - 150

Laboratory Control Spike (LCS-1) QC Batch: 11249

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	26.2	25.8	mg/L	0.1	250	<0.538	105	1	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	14.0	13.9	mg/L	0.1	150	93	93	81.8 - 161

Laboratory Control Spike (LCS-1) QC Batch: 11327

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	27.8	28.1	mg/L	0.1	250	<0.538	111	1	68 - 140	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	12.7	12.9	mg/L	0.1	150	85	86	81.8 - 161

Standard (ICV-1) QC Batch: 10864

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	300	120	68 - 140	2004-07-03

Standard (CCV-1) QC Batch: 10864

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	258	103	68 - 140	2004-07-03

Standard (ICV-1) QC Batch: 10997

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	256	102	80 - 120	2004-07-12

[4]Surrogate recovery out of range. QC show the process within control.
[5]Surrogate recovery out of range. QC show the process within control.

Standard (CCV-1) QC Batch: 10997

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	263	105	80 - 120	2004-07-12

Standard (ICV-1) QC Batch: 11249

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	248	99	68 - 140	2004-07-21

Standard (CCV-1) QC Batch: 11249

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	264	106	68 - 140	2004-07-21

Standard (ICV-1) QC Batch: 11327

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	279	112	68 - 140	2004-07-24

Standard (CCV-1) QC Batch: 11327

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	283	113	68 - 140	2004-07-24

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 10 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	10956	Date Analyzed:	2004-07-09	Analyzed By:	DS
Prep Batch:	9614	Date Prepared:	2004-07-06	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.02	μg/L	1	2.50	81	35.8 - 121

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	10956	Date Analyzed:	2004-07-09	Analyzed By:	DS
Prep Batch:	9614	Date Prepared:	2004-07-06	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.73	μg/L	1	2.50	69	35.8 - 121

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11062	Date Analyzed:	2004-07-13	Analyzed By:	DS
Prep Batch:	9780	Date Prepared:	2004-07-13	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	µg/L	1	0.500
RDX		<0.500	µg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	µg/L	1	0.500
1,3-Dinitrobenzene		<0.500	µg/L	1	0.500
Tetryl		<0.500	µg/L	1	0.500
Nitrobenzene		<0.500	µg/L	1	0.500
TNT		<0.500	µg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	µg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	µg/L	1	0.500
2-NT		<0.500	µg/L	1	0.500
4-NT		0.841	µg/L	1	0.500
3-NT		<0.500	µg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.22	µg/L	1	2.50	89	35.8 - 121

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11362	Date Analyzed:	2004-07-26	Analyzed By:	DS
Prep Batch:	10046	Date Prepared:	2004-07-26	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	µg/L	1	0.500
RDX		<0.500	µg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	µg/L	1	0.500
1,3-Dinitrobenzene		<0.500	µg/L	1	0.500
Tetryl		<0.500	µg/L	1	0.500
Nitrobenzene		<0.500	µg/L	1	0.500
TNT		<0.500	µg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	µg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	µg/L	1	0.500
2-NT		<0.500	µg/L	1	0.500
4-NT		<0.500	µg/L	1	0.500
3-NT		<0.500	µg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.05	µg/L	1	2.50	42	35.8 - 121

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11362	Date Analyzed:	2004-07-26	Analyzed By:	DS
Prep Batch:	10046	Date Prepared:	2004-07-26	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.70	μg/L	1	2.50	68	35.8 - 121

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	11362	Date Analyzed:	2004-07-26	Analyzed By:	DS
Prep Batch:	10046	Date Prepared:	2004-07-26	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
HMX		<0.500	μg/L	1	0.500
RDX		<0.500	μg/L	1	0.500
1,3,5-Trinitrobenzene		<0.500	μg/L	1	0.500
1,3-Dinitrobenzene		<0.500	μg/L	1	0.500
Tetryl		<0.500	μg/L	1	0.500
Nitrobenzene		<0.500	μg/L	1	0.500
TNT		<0.500	μg/L	1	0.500
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	1	0.500
2,6-DNT / 2,4-DNT		<0.500	μg/L	1	0.500
2-NT		<0.500	μg/L	1	0.500
4-NT		<0.500	μg/L	1	0.500
3-NT		<0.500	μg/L	1	0.500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.62	μg/L	1	2.50	65	35.8 - 121

Method Blank (1) QC Batch: 10956

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		3.02	μg/L	1	2.50	121	35.8 - 121

Method Blank (1) QC Batch: 11062

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.53	μg/L	1	2.50	61	35.8 - 121

Method Blank (1) QC Batch: 11362

Parameter	Flag	Result	Units	RL
HMX		<0.500	μg/L	0.5
RDX		<0.500	μg/L	0.5
1,3,5-Trinitrobenzene		<0.500	μg/L	0.5
1,3-Dinitrobenzene		<0.500	μg/L	0.5
Tetryl		<0.500	μg/L	0.5
Nitrobenzene		<0.500	μg/L	0.5
TNT		<0.500	μg/L	0.5
4-amino-DNT / 2-amino-DNT		<0.500	μg/L	0.5
2,6-DNT / 2,4-DNT		<0.500	μg/L	0.5
2-NT		<0.500	μg/L	0.5
4-NT		<0.500	μg/L	0.5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
3-NT		<0.500	μg/L	0.5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		1.07	μg/L	1	2.50	43	35.8 - 121

Laboratory Control Spike (LCS-1) QC Batch: 10956

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.70	2.69	μg/L	1	2.50	<0.196	108	0	52.3 - 129	20
RDX	2.25	2.42	μg/L	1	2.50	<0.364	90	7	65.7 - 117	20
1,3,5-Trinitrobenzene	2.51	2.47	μg/L	1	2.50	<0.114	100	2	30.3 - 141	20
1,3-Dinitrobenzene	2.53	2.53	μg/L	1	2.50	<0.108	101	0	45.9 - 139	20
Tetryl	3.12	3.06	μg/L	1	2.50	<0.200	125	2	49 - 129	20
Nitrobenzene	2.38	2.62	μg/L	1	2.50	<0.0990	95	10	0 - 133	20
TNT	2.31	2.66	μg/L	1	2.50	<0.116	92	14	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.79	2.83	μg/L	1	2.50	<0.146	112	1	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.58	2.38	μg/L	1	2.50	<0.183	103	8	44.8 - 130	20
2-NT	2.70	2.65	μg/L	1	2.50	<0.139	108	2	44.9 - 128	20
4-NT	2.64	2.65	μg/L	1	2.50	<0.0851	106	0	47.8 - 123	20
3-NT	2.86	2.75	μg/L	1	2.50	<0.176	114	4	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.61	2.71	μg/L	1	2.50	104	108	42 - 125

Laboratory Control Spike (LCS-1) QC Batch: 11062

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.29	2.46	μg/L	1	2.50	<0.196	92	7	52.3 - 129	20
RDX	2.41	2.49	μg/L	1	2.50	<0.364	96	3	65.7 - 117	20
1,3,5-Trinitrobenzene	2.57	2.90	μg/L	1	2.50	<0.114	103	12	30.3 - 141	20
1,3-Dinitrobenzene	2.54	2.50	μg/L	1	2.50	<0.108	102	2	45.9 - 139	20
Tetryl	2.75	2.69	μg/L	1	2.50	<0.200	110	2	49 - 129	20
Nitrobenzene	2.54	2.54	μg/L	1	2.50	<0.0990	102	0	0 - 133	20
TNT	2.44	2.53	μg/L	1	2.50	<0.116	98	4	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.35	2.49	μg/L	1	2.50	<0.146	94	6	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.54	2.49	μg/L	1	2.50	<0.183	102	2	44.8 - 130	20
2-NT	2.46	2.48	μg/L	1	2.50	<0.139	98	1	44.9 - 128	20
4-NT	2.55	2.44	μg/L	1	2.50	<0.0851	102	4	47.8 - 123	20
3-NT	2.49	2.52	μg/L	1	2.50	<0.176	100	1	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.49	2.35	μg/L	1	2.50	100	94	42 - 125

Laboratory Control Spike (LCS-1) QC Batch: 11362

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX	2.48	2.44	μg/L	1	2.50	<0.196	99	2	52.3 - 129	20
RDX	2.51	2.58	μg/L	1	2.50	<0.364	100	3	65.7 - 117	20
1,3,5-Trinitrobenzene	2.61	2.50	μg/L	1	2.50	<0.114	104	4	30.3 - 141	20
1,3-Dinitrobenzene	2.50	2.55	μg/L	1	2.50	<0.108	100	2	45.9 - 139	20
Tetryl	2.51	2.55	μg/L	1	2.50	<0.200	100	2	49 - 129	20
Nitrobenzene	2.53	2.53	μg/L	1	2.50	<0.0990	101	0	0 - 133	20
TNT	2.58	2.48	μg/L	1	2.50	<0.116	103	4	67.8 - 126	20
4-amino-DNT / 2-amino-DNT	2.58	2.58	μg/L	1	2.50	<0.146	103	0	47.9 - 135	20
2,6-DNT / 2,4-DNT	2.59	2.58	μg/L	1	2.50	<0.183	104	0	44.8 - 130	20
2-NT	2.50	2.51	μg/L	1	2.50	<0.139	100	0	44.9 - 128	20
4-NT	2.50	2.62	μg/L	1	2.50	<0.0851	100	5	47.8 - 123	20
3-NT	2.71	2.74	μg/L	1	2.50	<0.176	108	1	49.4 - 141	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.54	2.60	μg/L	1	2.50	102	104	42 - 125

Matrix Spike (MS-1) QC Batch: 10956

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
HMX		1.68	1.61	μg/L	1	2.50	<0.196	67	4	45 - 120	20
RDX		1.54	1.51	μg/L	1	2.50	<0.364	62	2	44.2 - 103	20
1,3,5-Trinitrobenzene	[1][2]	2.71	2.71	μg/L	1	2.50	<0.114	108	0	20.9 - 105	20
1,3-Dinitrobenzene	[3][4]	3.20	2.94	μg/L	1	2.50	<0.108	128	8	35.8 - 121	20
Tetryl	[5][6]	3.16	2.94	μg/L	1	2.50	<0.200	126	7	30.6 - 105	20
Nitrobenzene		2.19	2.22	μg/L	1	2.50	<0.0990	88	1	0 - 109	20
TNT		3.15	3.11	μg/L	1	2.50	<0.116	126	1	17.7 - 134	20
4-amino-DNT / 2-amino-DNT	[7][8]	2.97	2.92	μg/L	1	2.50	<0.146	119	2	43.7 - 97.4	20
2,6-DNT / 2,4-DNT		2.90	2.76	μg/L	1	2.50	<0.183	116	5	11.1 - 123	20
2-NT		2.57	2.25	μg/L	1	2.50	<0.139	103	13	11.1 - 113	20
4-NT	[9]	2.91	2.66	μg/L	1	2.50	<0.0851	116	9	30.2 - 114	20
3-NT		2.76	2.46	μg/L	1	2.50	<0.176	110	11	53.4 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[1]MS and MSD recovery out of range due to peak interference. LCS and LCSD show process is within control.
[2]MS and MSD recovery out of range due to peak interference. LCS and LCSD show process is within control.
[3]MS and MSD recovery out of range due to peak interference. LCS and LCSD show process is within control.
[4]MS and MSD recovery out of range due to peak interference. LCS and LCSD show process is within control.
[5]MS and MSD recovery out of range due to peak interference. LCS and LCSD show process is within control.
[6]MS and MSD recovery out of range due to peak interference. LCS and LCSD show process is within control.
[7]MS and MSD recovery out of range due to peak interference. LCS and LCSD show process is within control.
[8]MS and MSD recovery out of range due to peak interference. LCS and LCSD show process is within control.
[9]MS and MSD recovery out of range due to peak interference. LCS and LCSD show process is within control.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
1,2-Dinitrobenzene [10]	2.86	2.52	μg/L	1	2.5	114	101	27.9 - 112

Standard (ICV-1) QC Batch: 10956

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		μg/L	500	530	106	85 - 115	2004-07-09
RDX		μg/L	500	492	98	85 - 115	2004-07-09
1,3,5-Trinitrobenzene		μg/L	500	534	107	85 - 115	2004-07-09
1,3-Dinitrobenzene		μg/L	500	524	105	85 - 115	2004-07-09
Tetryl		μg/L	500	553	111	85 - 115	2004-07-09
Nitrobenzene		μg/L	500	487	97	85 - 115	2004-07-09
TNT		μg/L	500	516	103	85 - 115	2004-07-09
4-amino-DNT / 2-amino-DNT		μg/L	500	520	104	85 - 115	2004-07-09
2,6-DNT / 2,4-DNT		μg/L	500	472	94	85 - 115	2004-07-09
2-NT		μg/L	500	566	113	85 - 115	2004-07-09
4-NT		μg/L	500	427	85	85 - 115	2004-07-09
3-NT		μg/L	500	565	113	85 - 115	2004-07-09

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.56	μg/L	1	2.50	102	85 - 115

Standard (CCV-1) QC Batch: 10956

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		μg/L	500	538	108	85 - 115	2004-07-09
RDX		μg/L	500	453	91	85 - 115	2004-07-09
1,3,5-Trinitrobenzene		μg/L	500	529	106	85 - 115	2004-07-09
1,3-Dinitrobenzene		μg/L	500	537	107	85 - 115	2004-07-09
Tetryl		μg/L	500	519	104	85 - 115	2004-07-09
Nitrobenzene		μg/L	500	487	97	85 - 115	2004-07-09
TNT		μg/L	500	573	115	85 - 115	2004-07-09
4-amino-DNT / 2-amino-DNT		μg/L	500	565	113	85 - 115	2004-07-09
2,6-DNT / 2,4-DNT		μg/L	500	498	100	85 - 115	2004-07-09
2-NT		μg/L	500	513	103	85 - 115	2004-07-09
4-NT		μg/L	500	527	105	85 - 115	2004-07-09
3-NT		μg/L	500	513	103	85 - 115	2004-07-09

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.69	μg/L	1	2.50	108	85 - 115

Standard (ICV-1) QC Batch: 11062

[10] MS and MSD recovery out of range due to peak interference. LCS and LCSD show process is within control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	474	95	85 - 115	2004-07-13
RDX		µg/L	500	503	101	85 - 115	2004-07-13
1,3,5-Trinitrobenzene		µg/L	500	515	103	85 - 115	2004-07-13
1,3-Dinitrobenzene		µg/L	500	477	95	85 - 115	2004-07-13
Tetryl		µg/L	500	520	104	85 - 115	2004-07-13
Nitrobenzene		µg/L	500	523	105	85 - 115	2004-07-13
TNT		µg/L	500	516	103	85 - 115	2004-07-13
4-amino-DNT / 2-amino-DNT		µg/L	500	500	100	85 - 115	2004-07-13
2,6-DNT / 2,4-DNT		µg/L	500	532	106	85 - 115	2004-07-13
2-NT		µg/L	500	501	100	85 - 115	2004-07-13
4-NT		µg/L	500	483	97	85 - 115	2004-07-13
3-NT		µg/L	500	498	100	85 - 115	2004-07-13

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.66	µg/L	1	2.50	106	85 - 115

Standard (CCV-1) QC Batch: 11062

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	478	96	85 - 115	2004-07-13
RDX		µg/L	500	539	108	85 - 115	2004-07-13
1,3,5-Trinitrobenzene		µg/L	500	537	107	85 - 115	2004-07-13
1,3-Dinitrobenzene		µg/L	500	505	101	85 - 115	2004-07-13
Tetryl		µg/L	500	543	109	85 - 115	2004-07-13
Nitrobenzene		µg/L	500	556	111	85 - 115	2004-07-13
TNT		µg/L	500	500	100	85 - 115	2004-07-13
4-amino-DNT / 2-amino-DNT		µg/L	500	546	109	85 - 115	2004-07-13
2,6-DNT / 2,4-DNT		µg/L	500	545	109	85 - 115	2004-07-13
2-NT		µg/L	500	495	99	85 - 115	2004-07-13
4-NT		µg/L	500	496	99	85 - 115	2004-07-13
3-NT		µg/L	500	504	101	85 - 115	2004-07-13

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.74	µg/L	1	2.50	110	85 - 115

Standard (ICV-1) QC Batch: 11362

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	477	95	85 - 115	2004-07-26
RDX		µg/L	500	515	103	85 - 115	2004-07-26
1,3,5-Trinitrobenzene		µg/L	500	478	96	85 - 115	2004-07-26
1,3-Dinitrobenzene		µg/L	500	483	97	85 - 115	2004-07-26
Tetryl		µg/L	500	466	93	85 - 115	2004-07-26
Nitrobenzene		µg/L	500	484	97	85 - 115	2004-07-26

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TNT		µg/L	500	487	97	85 - 115	2004-07-26
4-amino-DNT / 2-amino-DNT		µg/L	500	498	100	85 - 115	2004-07-26
2,6-DNT / 2,4-DNT		µg/L	500	506	101	85 - 115	2004-07-26
2-NT		µg/L	500	465	93	85 - 115	2004-07-26
4-NT		µg/L	500	475	95	85 - 115	2004-07-26
3-NT		µg/L	500	485	97	85 - 115	2004-07-26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.45	µg/L	1	2.50	98	85 - 115

Standard (CCV-1) QC Batch: 11362

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	482	96	85 - 115	2004-07-26
RDX		µg/L	500	462	92	85 - 115	2004-07-26
1,3,5-Trinitrobenzene		µg/L	500	538	108	85 - 115	2004-07-26
1,3-Dinitrobenzene		µg/L	500	467	93	85 - 115	2004-07-26
Tetryl		µg/L	500	466	93	85 - 115	2004-07-26
Nitrobenzene		µg/L	500	487	97	85 - 115	2004-07-26
TNT		µg/L	500	457	91	85 - 115	2004-07-26
4-amino-DNT / 2-amino-DNT		µg/L	500	437	87	85 - 115	2004-07-26
2,6-DNT / 2,4-DNT		µg/L	500	443	89	85 - 115	2004-07-26
2-NT		µg/L	500	480	96	85 - 115	2004-07-26
4-NT		µg/L	500	477	95	85 - 115	2004-07-26
3-NT		µg/L	500	516	103	85 - 115	2004-07-26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		2.36	µg/L	1	2.50	94	85 - 115

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	10843	Date Analyzed:	2004-07-04	Analyzed By:	MS
Prep Batch:	9592	Date Prepared:	2004-07-04	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0951	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)	[1]	0.0692	mg/L	1	0.100	69	70 - 130

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	10843	Date Analyzed:	2004-07-04	Analyzed By:	MS
Prep Batch:	9592	Date Prepared:	2004-07-04	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0967	mg/L	1	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)	[2]	0.0675	mg/L	1	0.100	68	70 - 130

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	10944	Date Analyzed:	2004-07-08	Analyzed By:	MT
Prep Batch:	9679	Date Prepared:	2004-07-08	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0957	mg/L	1	0.100	96	70 - 130
4-Bromofluorobenzene (4-BFB)	[3]	0.0644	mg/L	1	0.100	64	70 - 130

Sample: 39196 - HLSF-3839-HMW-032-0604

[1]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.
[2]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.
[3]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11315	Date Analyzed:	2004-07-23	Analyzed By:	MT
Prep Batch:	10003	Date Prepared:	2004-07-23	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[4]	0.0442	mg/L	1	0.100	44	70 - 130
4-Bromofluorobenzene (4-BFB)	[5]	0.0261	mg/L	1	0.100	26	70 - 130

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11315	Date Analyzed:	2004-07-23	Analyzed By:	MT
Prep Batch:	10003	Date Prepared:	2004-07-23	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0880	mg/L	1	0.100	88	70 - 130
4-Bromofluorobenzene (4-BFB)	[6]	0.0638	mg/L	1	0.100	64	70 - 130

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	11315	Date Analyzed:	2004-07-23	Analyzed By:	MT
Prep Batch:	10003	Date Prepared:	2004-07-23	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0867	mg/L	1	0.100	87	70 - 130
4-Bromofluorobenzene (4-BFB)	[7]	0.0631	mg/L	1	0.100	63	70 - 130

Method Blank (1) QC Batch: 10843

[4]Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.
[5]Low surrogate recovery due to matrix interference. ICV/CCV show the method to be in control.
[6]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.
[7]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.

Parameter	Flag	Result	Units	RL
GRO		0.167	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0953	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)	[8]	0.0692	mg/L	1	0.100	69	70 - 130

Method Blank (1) QC Batch: 10944

Parameter	Flag	Result	Units	RL
GRO		0.158	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0939	mg/L	1	0.100	94	70 - 130
4-Bromofluorobenzene (4-BFB)	[9]	0.0591	mg/L	1	0.100	59	70 - 130

Method Blank (1) QC Batch: 11315

Parameter	Flag	Result	Units	RL
GRO		0.159	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0912	mg/L	1	0.100	91	70 - 130
4-Bromofluorobenzene (4-BFB)	[10]	0.0644	mg/L	1	0.100	64	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 10843

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	1.02	1.02	mg/L	1	1.00	<0.0261	102	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.100	0.0939	mg/L	1	0.100	100	94	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0875	0.0863	mg/L	1	0.100	88	86	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 10944

[8]Low surrogate recovery due to prep. ICV/CCV show the method to be in control.
[9]Low surrogate recovery due to prep. ICV/CCV show the method to be in control.
[10]Low surrogate recovery due to prep. ICV/CCV show the method to be in control.

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	0.905	0.915	mg/L	1	1.00	<0.0261	90	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0948	0.0951	mg/L	1	0.100	95	95	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0804	0.0817	mg/L	1	0.100	80	82	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11315

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	0.913	0.830	mg/L	1	1.00	<0.0261	91	10	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0977	0.0938	mg/L	1	0.100	98	94	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0853	0.0816	mg/L	1	0.100	85	82	70 - 130

Standard (ICV-1) QC Batch: 10843

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.06	106	85 - 115	2004-07-04

Standard (CCV-1) QC Batch: 10843

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.02	102	85 - 115	2004-07-04

Standard (ICV-1) QC Batch: 10944

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.909	91	85 - 115	2004-07-08

Standard (CCV-1) QC Batch: 10944

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.944	94	85 - 115	2004-07-08

Standard (ICV-1) QC Batch: 11315

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.929	93	85 - 115	2004-07-23

Standard (CCV-1) QC Batch: 11315

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.952	95	85 - 115	2004-07-23

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	10946	Date Analyzed:	2004-07-09	Analyzed By:	BC
Prep Batch:	9682	Date Prepared:	2004-07-09	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	10946	Date Analyzed:	2004-07-09	Analyzed By:	BC
Prep Batch:	9682	Date Prepared:	2004-07-09	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	10946	Date Analyzed:	2004-07-09	Analyzed By:	BC
Prep Batch:	9682	Date Prepared:	2004-07-09	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	11335	Date Analyzed:	2004-07-26	Analyzed By:	BC
Prep Batch:	10023	Date Prepared:	2004-07-26	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	11335	Date Analyzed:	2004-07-26	Analyzed By:	BC
Prep Batch:	10023	Date Prepared:	2004-07-26	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	11335	Date Analyzed:	2004-07-26	Analyzed By:	BC
Prep Batch:	10023	Date Prepared:	2004-07-26	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Mercury		<0.000200	mg/L	1	0.000200

Method Blank (1) QC Batch: 10946

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Method Blank (1) QC Batch: 11335

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Laboratory Control Spike (LCS-1) QC Batch: 10946

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00106	0.00112	mg/L	1	0.00100	<0.0000329	106	6	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11335

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00101	0.00107	mg/L	1	0.00100	<0.0000329	101	6	82 - 120	20
Total Mercury	0.00101	0.00107	mg/L	1	0.00100	<0.0000329	101	6	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10946

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00112	0.00113	mg/L	1	0.00100	<0.0000329	112	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) QC Batch: 10946

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00109	0.00111	mg/L	1	0.00100	<0.0000329	109	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) QC Batch: 11335

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.00111	0.00109	mg/L	1	0.00100	<0.0000329	111	2	80 - 120	20
Total Mercury	0.00111	0.00109	mg/L	1	0.00100	<0.0000329	111	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 10946

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00106	106	80 - 120	2004-07-09

Standard (CCV-1) QC Batch: 10946

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.000930	93	80 - 120	2004-07-09

Standard (CCV-2) QC Batch: 10946

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.000930	93	80 - 120	2004-07-09

Standard (CCV-1) QC Batch: 11335

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.000930	93	80 - 120	2004-07-26

Standard (CCV-2) QC Batch: 11335

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.000950	95	80 - 120	2004-07-26

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 10 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	10860	Date Analyzed:	2004-06-30	Analyzed By:	JR
Prep Batch:	9601	Date Prepared:	2004-06-30	Prepared By:	JR
QC Batch:	10986	Date Analyzed:	2004-07-07	Analyzed By:	JR
Prep Batch:	9711	Date Prepared:	2004-07-07	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		925	mg/L	100	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		23.2	mg/L	10	0.100
Sulfate		5500	mg/L	500	1.00

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	10866	Date Analyzed:	2004-07-01	Analyzed By:	JR
Prep Batch:	9609	Date Prepared:	2004-07-01	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		800	mg/L	100	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		14.5	mg/L	10	0.100
Sulfate		6730	mg/L	500	1.00

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	10986	Date Analyzed:	2004-07-07	Analyzed By:	JR
Prep Batch:	9711	Date Prepared:	2004-07-07	Prepared By:	JR
QC Batch:	11116	Date Analyzed:	2004-07-16	Analyzed By:	JR
Prep Batch:	9824	Date Prepared:	2004-07-16	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.660	mg/L	1	0.200
Chloride		1170	mg/L	100	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		35.4	mg/L	10	0.100
Sulfate		6410	mg/L	500	1.00

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11603	Date Analyzed:	2004-07-20	Analyzed By:	JR
Prep Batch:	10087	Date Prepared:	2004-07-20	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<0.200	mg/L	1	0.200
Chloride		1170	mg/L	100	2.00
Fluoride		<0.200	mg/L	1	0.200
Nitrite-N		<0.100	mg/L	1	0.100
Nitrate-N		28.0	mg/L	10	0.100
Sulfate		6380	mg/L	500	1.00

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11609	Date Analyzed:	2004-07-21	Analyzed By:	JR
Prep Batch:	10255	Date Prepared:	2004-07-21	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		3.66	mg/L	5	0.200
Chloride		5580	mg/L	500	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		147	mg/L	50	0.100
Sulfate		12500	mg/L	1000	1.00

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	11609	Date Analyzed:	2004-07-21	Analyzed By:	JR
Prep Batch:	10255	Date Prepared:	2004-07-21	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		3.90	mg/L	5	0.200
Chloride		5790	mg/L	500	2.00
Fluoride		<1.00	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		150	mg/L	50	0.100
Sulfate		13000	mg/L	1000	1.00

Method Blank (1) QC Batch: 10860

Parameter	Flag	Result	Units	RL
Chloride		<2.00	mg/L	2

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 10866

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 10986

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 11116

Parameter	Flag	Result	Units	RL
Fluoride		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 11603

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Method Blank (1) QC Batch: 11609

Parameter	Flag	Result	Units	RL
Bromide		<0.200	mg/L	0.2
Chloride		<2.00	mg/L	2
Fluoride		<0.200	mg/L	0.2
Nitrite-N		<0.100	mg/L	0.1
Nitrate-N		<0.100	mg/L	0.1
Sulfate		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 10860

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	11.5	11.5	mg/L	1	12.5	<0.310	92	0	87.3 - 101	3
Fluoride	2.38	2.38	mg/L	1	2.50	<0.0400	95	0	88.6 - 107	2
Nitrite-N	2.38	2.40	mg/L	1	2.50	<0.0100	95	1	90.5 - 103	2
Nitrate-N	2.42	2.43	mg/L	1	2.50	<0.0100	97	0	87.8 - 107	1.4
Sulfate	12.1	12.1	mg/L	1	12.5	<0.160	97	0	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 10866

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.47	2.47	mg/L	1	2.50	<0.0800	99	0	88.5 - 108	4
Chloride	11.4	11.5	mg/L	1	12.5	<0.310	91	1	87.3 - 101	3
Fluoride	2.36	2.38	mg/L	1	2.50	<0.0400	94	1	88.6 - 107	2
Nitrite-N	2.40	2.41	mg/L	1	2.50	<0.0100	96	0	90.5 - 103	2
Nitrate-N	2.41	2.41	mg/L	1	2.50	<0.0100	96	0	87.8 - 107	1.4
Sulfate	12.2	12.1	mg/L	1	12.5	<0.160	98	1	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 10986

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.50	2.49	mg/L	1	2.50	<0.0800	100	0	88.5 - 108	4
Chloride	11.5	11.5	mg/L	1	12.5	<0.310	92	0	87.3 - 101	3
Nitrite-N	2.40	2.43	mg/L	1	2.50	<0.0100	96	1	90.5 - 103	2
Nitrate-N	2.43	2.44	mg/L	1	2.50	<0.0100	97	0	87.8 - 107	1.4
Sulfate	12.1	12.2	mg/L	1	12.5	<0.160	97	1	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11116

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	2.30	2.33	mg/L	1	2.50	<0.0400	92	1	88.6 - 107	2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11603

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.42	2.41	mg/L	1	2.50	<0.0800	97	0	88.5 - 108	4
Chloride	11.3	11.3	mg/L	1	12.5	<0.310	90	0	87.3 - 101	3
Fluoride	2.32	2.33	mg/L	1	2.50	<0.0400	93	0	88.6 - 107	2
Nitrite-N	2.34	2.34	mg/L	1	2.50	<0.0100	94	0	90.5 - 103	2
Nitrate-N	2.39	2.38	mg/L	1	2.50	<0.0100	96	0	87.8 - 107	1.4
Sulfate	12.0	11.9	mg/L	1	12.5	<0.160	96	1	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11609

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	2.45	2.46	mg/L	1	2.50	<0.0800	98	0	88.5 - 108	4
Chloride	11.4	11.4	mg/L	1	12.5	<0.310	91	0	87.3 - 101	3
Fluoride	2.35	2.34	mg/L	1	2.50	<0.0400	94	0	88.6 - 107	2
Nitrite-N	2.38	2.36	mg/L	1	2.50	<0.0100	95	1	90.5 - 103	2
Nitrate-N	2.42	2.41	mg/L	1	2.50	<0.0100	97	0	87.8 - 107	1.4
Sulfate	12.1	12.1	mg/L	1	12.5	<0.160	97	0	90.6 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10860

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	6690	6670	mg/L	500	12.5	1160	88	0	78 - 107	3
Fluoride	1190	1190	mg/L	500	2.50	<20.0	95	0	88.3 - 108	2
Nitrite-N	1190	1190	mg/L	500	2.50	<5.00	95	0	89.4 - 105	2
Nitrate-N	1230	1230	mg/L	500	2.50	<5.00	98	0	78.3 - 109	2
Sulfate	11400	11400	mg/L	500	12.5	5500	94	0	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10866

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1220	1220	mg/L	500	2.50	<40.0	98	0	85.2 - 113	3
Chloride	6610	6570	mg/L	500	12.5	1080	88	1	78 - 107	3
Fluoride	1180	1180	mg/L	500	2.50	<20.0	94	0	88.3 - 108	2
Nitrite-N	1210	1200	mg/L	500	2.50	<5.00	97	1	89.4 - 105	2

continued . . .

matrix spikes continued . . .

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	1220	1220	mg/L	500	2.50	<5.00	98	0	78.3 - 109	2
Sulfate	12900	12700	mg/L	500	12.5	6730	99	2	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10986

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1250	1250	mg/L	500	2.50	<40.0	100	0	85.2 - 113	3
Chloride	6910	6920	mg/L	500	12.5	1170	92	0	78 - 107	3
Nitrite-N	1210	1210	mg/L	500	2.50	<5.00	97	0	89.4 - 105	2
Nitrate-N	1250	1250	mg/L	500	2.50	35.4	97	0	78.3 - 109	2
Sulfate	12100	12100	mg/L	500	12.5	6410	91	0	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11116

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	12.7	12.7	mg/L	5	2.50	<0.200	102	0	88.3 - 108	2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11603

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1230	1230	mg/L	500	2.50	<40.0	98	0	85.2 - 113	3
Chloride	6840	6900	mg/L	500	12.5	1170	91	1	78 - 107	3
Fluoride	1160	1190	mg/L	500	2.50	<20.0	93	2	88.3 - 108	2
Nitrite-N	1190	1200	mg/L	500	2.50	<5.00	95	1	89.4 - 105	2
Nitrate-N	1220	1240	mg/L	500	2.50	28	95	2	78.3 - 109	2
Sulfate	12200	12100	mg/L	500	12.5	6380	93	1	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11609

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Bromide	1240	1240	mg/L	500	2.50	<40.0	99	0	85.2 - 113	3
Chloride	11400	11400	mg/L	500	12.5	5580	93	0	78 - 107	3
Fluoride	1180	1180	mg/L	500	2.50	<20.0	94	0	88.3 - 108	2
Nitrite-N	1200	1190	mg/L	500	2.50	<5.00	96	1	89.4 - 105	2
Nitrate-N	1350	1340	mg/L	500	2.50	147	96	1	78.3 - 109	2
Sulfate	18600	18600	mg/L	500	12.5	12500	98	0	81 - 106	3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 10860

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.7	94	90 - 110	2004-06-30
Fluoride		mg/L	2.50	2.40	96	90 - 110	2004-06-30
Nitrite-N		mg/L	2.50	2.39	96	90 - 110	2004-06-30
Nitrate-N		mg/L	2.50	2.31	92	90 - 110	2004-06-30
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-06-30

Standard (CCV-1) QC Batch: 10860

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.7	94	85 - 115	2004-06-30
Fluoride		mg/L	2.50	2.39	96	85 - 115	2004-06-30
Nitrite-N		mg/L	2.50	2.40	96	85 - 115	2004-06-30
Nitrate-N		mg/L	2.50	2.31	92	85 - 115	2004-06-30
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-06-30

Standard (ICV-1) QC Batch: 10866

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	2004-07-01
Chloride		mg/L	12.5	11.7	94	90 - 110	2004-07-01
Fluoride		mg/L	2.50	2.39	96	90 - 110	2004-07-01
Nitrite-N		mg/L	2.50	2.40	96	90 - 110	2004-07-01
Nitrate-N		mg/L	2.50	2.31	92	90 - 110	2004-07-01
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-07-01

Standard (CCV-1) QC Batch: 10866

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.43	97	90 - 110	2004-07-01
Chloride		mg/L	12.5	11.7	94	85 - 115	2004-07-01
Fluoride		mg/L	2.50	2.39	96	85 - 115	2004-07-01
Nitrite-N		mg/L	2.50	2.40	96	85 - 115	2004-07-01
Nitrate-N		mg/L	2.50	2.32	93	85 - 115	2004-07-01
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-07-01

Standard (ICV-1) QC Batch: 10986

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.42	97	90 - 110	2004-07-07

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.8	94	90 - 110	2004-07-07
Nitrite-N		mg/L	2.50	2.39	96	90 - 110	2004-07-07
Nitrate-N		mg/L	2.50	2.32	93	90 - 110	2004-07-07
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-07-07

Standard (CCV-1) QC Batch: 10986

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.45	98	90 - 110	2004-07-07
Chloride		mg/L	12.5	11.7	94	85 - 115	2004-07-07
Nitrite-N		mg/L	2.50	2.40	96	85 - 115	2004-07-07
Nitrate-N		mg/L	2.50	2.33	93	85 - 115	2004-07-07
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-07-07

Standard (ICV-1) QC Batch: 11116

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.34	94	90 - 110	2004-07-16

Standard (CCV-1) QC Batch: 11116

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.37	95	85 - 115	2004-07-16

Standard (ICV-1) QC Batch: 11603

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.37	95	90 - 110	2004-07-20
Chloride		mg/L	12.5	11.3	90	90 - 110	2004-07-20
Fluoride		mg/L	2.50	2.32	93	90 - 110	2004-07-20
Nitrite-N		mg/L	2.50	2.30	92	90 - 110	2004-07-20
Nitrate-N		mg/L	2.50	2.25	90	90 - 110	2004-07-20
Sulfate		mg/L	12.5	11.3	90	90 - 110	2004-07-20

Standard (CCV-1) QC Batch: 11603

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.40	96	90 - 110	2004-07-20
Chloride		mg/L	12.5	11.5	92	85 - 115	2004-07-20
Fluoride		mg/L	2.50	2.36	94	85 - 115	2004-07-20
Nitrite-N		mg/L	2.50	2.34	94	85 - 115	2004-07-20
Nitrate-N		mg/L	2.50	2.29	92	85 - 115	2004-07-20
Sulfate		mg/L	12.5	11.5	92	85 - 115	2004-07-20

Standard (ICV-1) QC Batch: 11609

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.40	96	90 - 110	2004-07-21
Chloride		mg/L	12.5	11.5	92	90 - 110	2004-07-21
Fluoride		mg/L	2.50	2.35	94	90 - 110	2004-07-21
Nitrite-N		mg/L	2.50	2.34	94	90 - 110	2004-07-21
Nitrate-N		mg/L	2.50	2.30	92	90 - 110	2004-07-21
Sulfate		mg/L	12.5	11.5	92	90 - 110	2004-07-21

Standard (CCV-1) QC Batch: 11609

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	2004-07-21
Chloride		mg/L	12.5	11.6	93	85 - 115	2004-07-21
Fluoride		mg/L	2.50	2.36	94	85 - 115	2004-07-21
Nitrite-N		mg/L	2.50	2.35	94	85 - 115	2004-07-21
Nitrate-N		mg/L	2.50	2.30	92	85 - 115	2004-07-21
Sulfate		mg/L	12.5	11.6	93	85 - 115	2004-07-21

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3510C
QC Batch:	10842	Date Analyzed:	2004-07-05	Analyzed By:	AG
Prep Batch:	9590	Date Prepared:	2004-07-05	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100
Toxaphene		<0.00500	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000980	mg/L	0.005	0.200	98	36.1 - 118.9
Deca chlorobiphenyl		0.000890	mg/L	0.005	0.200	89	51.4 - 124.8

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3510C
QC Batch:	10842	Date Analyzed:	2004-07-05	Analyzed By:	AG
Prep Batch:	9590	Date Prepared:	2004-07-05	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100

continued . . .

sample 37911 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100
Toxaphene		<0.00500	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000830	mg/L	0.005	0.200	83	36.1 - 118.9
Deca chlorobiphenyl		0.000740	mg/L	0.005	0.200	74	51.4 - 124.8

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3510C
QC Batch:	11039	Date Analyzed:	2004-07-13	Analyzed By:	AG
Prep Batch:	9684	Date Prepared:	2004-07-09	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100

continued . . .

sample 38118 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Toxaphene		<0.00500	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00110	mg/L	0.005	0.200	110	36.1 - 118.9
Deca chlorobiphenyl		0.00100	mg/L	0.005	0.200	100	51.4 - 124.8

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3510C
QC Batch:	11426	Date Analyzed:	2004-07-28	Analyzed By:	AG
Prep Batch:	9955	Date Prepared:	2004-07-22	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100
Toxaphene		<0.00500	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000830	mg/L	0.005	0.200	83	36.1 - 118.9
Deca chlorobiphenyl		0.000830	mg/L	0.005	0.200	83	51.4 - 124.8

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3510C
QC Batch:	11426	Date Analyzed:	2004-07-28	Analyzed By:	AG

Prep Batch: 9955 Date Prepared: 2004-07-22 Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100
Toxaphene		<0.00500	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000930	mg/L	0.005	0.200	93	36.1 - 118.9
Deca chlorobiphenyl		0.000910	mg/L	0.005	0.200	91	51.4 - 124.8

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis: Pesticides Analytical Method: S 8081A Prep Method: S 3510C
QC Batch: 11426 Date Analyzed: 2004-07-28 Analyzed By: AG
Prep Batch: 9955 Date Prepared: 2004-07-22 Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.000500	mg/L	0.005	0.100
gamma-BHC (Lindane)		<0.000500	mg/L	0.005	0.100
beta-BHC		<0.000500	mg/L	0.005	0.100
Heptachlor		<0.000500	mg/L	0.005	0.100
delta-BHC		<0.000500	mg/L	0.005	0.100
Aldrin		<0.000500	mg/L	0.005	0.100
Heptachlor Epoxide		<0.000500	mg/L	0.005	0.100
gamma-Chlordane		<0.000500	mg/L	0.005	0.100
alpha-Chlordane		<0.000500	mg/L	0.005	0.100
Endosulfan I		<0.000500	mg/L	0.005	0.100
p,p-DDE		<0.000500	mg/L	0.005	0.100
Dieldrin		<0.000500	mg/L	0.005	0.100
Endrin		<0.000500	mg/L	0.005	0.100

continued . . .

sample 39336 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
p,p-DDD		<0.000500	mg/L	0.005	0.100
Endosulfan II		<0.000500	mg/L	0.005	0.100
p,p-DDT		<0.000500	mg/L	0.005	0.100
Endrin aldehyde		<0.000500	mg/L	0.005	0.100
Endosulfan sulfate		<0.000500	mg/L	0.005	0.100
Methoxychlor		<0.000500	mg/L	0.005	0.100
Endrin Ketone		<0.000500	mg/L	0.005	0.100
Toxaphene		<0.00500	mg/L	0.005	1.00
Technical Chlordane		<0.00500	mg/L	0.005	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000890	mg/L	0.005	0.200	89	36.1 - 118.9
Deca chlorobiphenyl		0.000840	mg/L	0.005	0.200	84	51.4 - 124.8

Method Blank (1) QC Batch: 10842

Parameter	Flag	Result	Units	RL
alpha-BHC		<0.000500	mg/L	0.1
gamma-BHC (Lindane)		<0.000500	mg/L	0.1
beta-BHC		<0.000500	mg/L	0.1
Heptachlor		<0.000500	mg/L	0.1
delta-BHC		<0.000500	mg/L	0.1
Aldrin		<0.000500	mg/L	0.1
Heptachlor Epoxide		<0.000500	mg/L	0.1
gamma-Chlordane		<0.000500	mg/L	0.1
alpha-Chlordane		<0.000500	mg/L	0.1
Endosulfan I		<0.000500	mg/L	0.1
p,p-DDE		<0.000500	mg/L	0.1
Dieldrin		<0.000500	mg/L	0.1
Endrin		<0.000500	mg/L	0.1
p,p-DDD		<0.000500	mg/L	0.1
Endosulfan II		<0.000500	mg/L	0.1
p,p-DDT		<0.000500	mg/L	0.1
Endrin aldehyde		<0.000500	mg/L	0.1
Endosulfan sulfate		<0.000500	mg/L	0.1
Methoxychlor		<0.000500	mg/L	0.1
Endrin Ketone		<0.000500	mg/L	0.1
Toxaphene		<0.00500	mg/L	1
Technical Chlordane		<0.00500	mg/L	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000890	mg/L	0.005	0.200	89	36.1 - 118.9
Deca chlorobiphenyl		0.000770	mg/L	0.005	0.200	77	51.4 - 124.8

Method Blank (1) QC Batch: 11039

Parameter	Flag	Result	Units	RL
alpha-BHC		<0.000500	mg/L	0.1
gamma-BHC (Lindane)		<0.000500	mg/L	0.1
beta-BHC		<0.000500	mg/L	0.1
Heptachlor		<0.000500	mg/L	0.1
delta-BHC		<0.000500	mg/L	0.1
Aldrin		<0.000500	mg/L	0.1
Heptachlor Epoxide		<0.000500	mg/L	0.1
gamma-Chlordane		<0.000500	mg/L	0.1
alpha-Chlordane		<0.000500	mg/L	0.1
Endosulfan I		<0.000500	mg/L	0.1
p,p-DDE		<0.000500	mg/L	0.1
Dieldrin		<0.000500	mg/L	0.1
Endrin		<0.000500	mg/L	0.1
p,p-DDD		<0.000500	mg/L	0.1
Endosulfan II		<0.000500	mg/L	0.1
p,p-DDT		<0.000500	mg/L	0.1
Endrin aldehyde		<0.000500	mg/L	0.1
Endosulfan sulfate		<0.000500	mg/L	0.1
Methoxychlor		<0.000500	mg/L	0.1
Endrin Ketone		<0.000500	mg/L	0.1
Toxaphene		<0.00500	mg/L	1
Technical Chlordane		<0.00500	mg/L	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00110	mg/L	0.005	0.200	110	36.1 - 118.9
Deca chlorobiphenyl		0.000980	mg/L	0.005	0.200	98	51.4 - 124.8

Method Blank (1) QC Batch: 11426

Parameter	Flag	Result	Units	RL
alpha-BHC		<0.000500	mg/L	0.1
gamma-BHC (Lindane)		<0.000500	mg/L	0.1
beta-BHC		<0.000500	mg/L	0.1
Heptachlor		<0.000500	mg/L	0.1
delta-BHC		<0.000500	mg/L	0.1
Aldrin		<0.000500	mg/L	0.1
Heptachlor Epoxide		<0.000500	mg/L	0.1
gamma-Chlordane		<0.000500	mg/L	0.1
alpha-Chlordane		<0.000500	mg/L	0.1
Endosulfan I		<0.000500	mg/L	0.1
p,p-DDE		<0.000500	mg/L	0.1
Dieldrin		<0.000500	mg/L	0.1
Endrin		<0.000500	mg/L	0.1
p,p-DDD		<0.000500	mg/L	0.1
Endosulfan II		<0.000500	mg/L	0.1
p,p-DDT		<0.000500	mg/L	0.1
Endrin aldehyde		<0.000500	mg/L	0.1
Endosulfan sulfate		<0.000500	mg/L	0.1
Methoxychlor		<0.000500	mg/L	0.1

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Endrin Ketone		<0.000500	mg/L	0.1
Toxaphene		<0.00500	mg/L	1
Technical Chlordane		<0.00500	mg/L	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000820	mg/L	0.005	0.200	82	36.1 - 118.9
Deca chlorobiphenyl		0.000770	mg/L	0.005	0.200	77	51.4 - 124.8

Laboratory Control Spike (LCS-1) QC Batch: 10842

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
alpha-BHC	0.000840	0.000850	mg/L	0.005	0.200	<0.0000247	84	1	70.8 - 103.2	20
gamma-BHC (Lindane)	0.000830	0.000840	mg/L	0.005	0.200	<0.0000204	83	1	69.6 - 102.9	20
beta-BHC	0.000850	0.000860	mg/L	0.005	0.200	<0.0000265	85	1	71.9 - 101.3	20
Heptachlor	0.000820	0.000820	mg/L	0.005	0.200	<0.0000193	82	0	71.4 - 103	20
delta-BHC	0.000790	0.000790	mg/L	0.005	0.200	<0.0000199	79	0	71.3 - 104.4	20
Aldrin	0.000900	0.000910	mg/L	0.005	0.200	<0.0000191	90	1	74.6 - 107.8	20
Heptachlor Epoxide	0.000820	0.000830	mg/L	0.005	0.200	<0.0000218	82	1	73.8 - 102.8	20
gamma-Chlordane	0.000740	0.000750	mg/L	0.005	0.200	<0.0000192	74	1	65 - 102	20
alpha-Chlordane	0.000780	0.000800	mg/L	0.005	0.200	<0.0000213	78	2	66.6 - 101.2	20
Endosulfan I	0.000810	0.000820	mg/L	0.005	0.200	<0.0000216	81	1	70 - 100.4	20
p,p-DDE	0.000860	0.000870	mg/L	0.005	0.200	<0.0000210	86	1	79.2 - 100.5	20
Dieldrin	0.000860	0.000870	mg/L	0.005	0.200	<0.0000228	86	1	72.2 - 102	20
Endrin	0.000850	0.000860	mg/L	0.005	0.200	<0.0000234	85	1	78.1 - 102.4	20
p,p-DDD	0.000720	0.000730	mg/L	0.005	0.200	<0.0000218	72	1	63.4 - 108.6	20
Endosulfan II	0.000800	0.000810	mg/L	0.005	0.200	<0.0000231	80	1	67.1 - 108.8	20
p,p-DDT	0.000850	0.000850	mg/L	0.005	0.200	<0.0000224	85	0	71.4 - 103	20
Endrin aldehyde	0.000810	0.000820	mg/L	0.005	0.200	<0.0000220	81	1	58.8 - 114	20
Endosulfan sulfate	0.000910	0.000910	mg/L	0.005	0.200	<0.00000994	91	0	36.7 - 134	20
Methoxychlor	0.000870	0.000850	mg/L	0.005	0.200	<0.0000234	87	2	70.1 - 111.2	20
Endrin Ketone	0.000810	0.000810	mg/L	0.005	0.200	<0.0000240	81	0	73.9 - 103	20
Toxaphene	0.00450	0.00440	mg/L	0.005	0.800	<0.000208	112	2	52.1 - 134.9	20
Technical Chlordane	0.00380	0.00370	mg/L	0.005	0.800	<0.000237	95	3	67.8 - 115.9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2,4,5,6-Tetrachloro-m-xylene	0.000970	0.000950	mg/L	0.005	0.200	97	95	36.1 - 118.9
Deca chlorobiphenyl	0.000850	0.000840	mg/L	0.005	0.200	85	84	51.4 - 124.8

Laboratory Control Spike (LCS-1) QC Batch: 11039

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
alpha-BHC	0.000920	0.000930	mg/L	0.005	0.200	<0.0000247	92	1	70.8 - 103.2	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
gamma-BHC (Lindane)	0.000860	0.000880	mg/L	0.005	0.200	<0.0000204	86	2	69.6 - 102.9	20
beta-BHC	0.000910	0.000950	mg/L	0.005	0.200	<0.0000265	91	4	71.9 - 101.3	20
Heptachlor	0.000850	0.000880	mg/L	0.005	0.200	<0.0000193	85	3	71.4 - 103	20
delta-BHC	0.000830	0.000850	mg/L	0.005	0.200	<0.0000199	83	2	71.3 - 104.4	20
Aldrin	0.000950	0.000970	mg/L	0.005	0.200	<0.0000191	95	2	74.6 - 107.8	20
Heptachlor Epoxide	0.000860	0.000880	mg/L	0.005	0.200	<0.0000218	86	2	73.8 - 102.8	20
gamma-Chlordane	0.000850	0.000880	mg/L	0.005	0.200	<0.0000192	85	3	65 - 102	20
alpha-Chlordane	0.000820	0.000830	mg/L	0.005	0.200	<0.0000213	82	1	66.6 - 101.2	20
Endosulfan I	0.000860	0.000880	mg/L	0.005	0.200	<0.0000216	86	2	70 - 100.4	20
p,p-DDE	0.000910	0.000930	mg/L	0.005	0.200	<0.0000210	91	2	79.2 - 100.5	20
Dieldrin	0.000900	0.000920	mg/L	0.005	0.200	<0.0000228	90	2	72.2 - 102	20
Endrin	0.000870	0.000890	mg/L	0.005	0.200	<0.0000234	87	2	78.1 - 102.4	20
p,p-DDD	0.000750	0.000760	mg/L	0.005	0.200	<0.0000218	75	1	63.4 - 108.6	20
Endosulfan II	0.000840	0.000860	mg/L	0.005	0.200	<0.0000231	84	2	67.1 - 108.8	20
p,p-DDT	0.000880	0.000900	mg/L	0.005	0.200	<0.0000224	88	2	71.4 - 103	20
Endrin aldehyde	0.000800	0.000820	mg/L	0.005	0.200	<0.0000220	80	2	58.8 - 114	20
Endosulfan sulfate	0.000910	0.000920	mg/L	0.005	0.200	<0.00000994	91	1	36.7 - 134	20
Methoxychlor	0.000890	0.000900	mg/L	0.005	0.200	<0.0000234	89	1	70.1 - 111.2	20
Endrin Ketone	0.000830	0.000840	mg/L	0.005	0.200	<0.0000240	83	1	73.9 - 103	20
Toxaphene	0.00480	0.00440	mg/L	0.005	0.800	<0.000208	120	9	52.1 - 134.9	20
Technical Chlordane	0.00410	0.00400	mg/L	0.005	0.800	<0.000237	102	2	67.8 - 115.9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2,4,5,6-Tetrachloro-m-xylene	0.000950	0.000980	mg/L	0.005	0.200	95	98	36.1 - 118.9
Deca chlorobiphenyl	0.000830	0.000840	mg/L	0.005	0.200	83	84	51.4 - 124.8

Laboratory Control Spike (LCS-1) QC Batch: 11426

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
alpha-BHC	0.000860	0.000850	mg/L	0.005	0.200	<0.0000247	86	1	70.8 - 103.2	20
gamma-BHC (Lindane)	0.000870	0.000880	mg/L	0.005	0.200	<0.0000204	87	1	69.6 - 102.9	20
beta-BHC	0.000840	0.000850	mg/L	0.005	0.200	<0.0000265	84	1	71.9 - 101.3	20
Heptachlor	0.000850	0.000870	mg/L	0.005	0.200	<0.0000193	85	2	71.4 - 103	20
delta-BHC	0.000860	0.000880	mg/L	0.005	0.200	<0.0000199	86	2	71.3 - 104.4	20
Aldrin	0.000860	0.000860	mg/L	0.005	0.200	<0.0000191	86	0	74.6 - 107.8	20
Heptachlor Epoxide	0.000830	0.000840	mg/L	0.005	0.200	<0.0000218	83	1	73.8 - 102.8	20
gamma-Chlordane	0.000830	0.000840	mg/L	0.005	0.200	<0.0000192	83	1	65 - 102	20
alpha-Chlordane	0.000850	0.000860	mg/L	0.005	0.200	<0.0000213	85	1	66.6 - 101.2	20
Endosulfan I	0.000840	0.000840	mg/L	0.005	0.200	<0.0000216	84	0	70 - 100.4	20
p,p-DDE	0.000850	0.000860	mg/L	0.005	0.200	<0.0000210	85	1	79.2 - 100.5	20
Dieldrin	0.000820	0.000850	mg/L	0.005	0.200	<0.0000228	82	4	72.2 - 102	20
Endrin	0.000870	0.000860	mg/L	0.005	0.200	<0.0000234	87	1	78.1 - 102.4	20
p,p-DDD	0.000760	0.000810	mg/L	0.005	0.200	<0.0000218	76	6	63.4 - 108.6	20
Endosulfan II	0.000830	0.000850	mg/L	0.005	0.200	<0.0000231	83	2	67.1 - 108.8	20
p,p-DDT	0.000860	0.000870	mg/L	0.005	0.200	<0.0000224	86	1	71.4 - 103	20
Endrin aldehyde	0.000820	0.000840	mg/L	0.005	0.200	<0.0000220	82	2	58.8 - 114	20
Endosulfan sulfate	0.000960	0.000950	mg/L	0.005	0.200	<0.00000994	96	1	36.7 - 134	20

continued . . .

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Methoxychlor	0.000920	0.000980	mg/L	0.005	0.200	<0.0000234	92	6	70.1 - 111.2	20
Endrin Ketone	0.000910	0.000930	mg/L	0.005	0.200	<0.0000240	91	2	73.9 - 103	20
Toxaphene	0.00420	0.00480	mg/L	0.005	0.800	<0.000208	105	13	52.1 - 134.9	20
Technical Chlordane	0.00350	0.00340	mg/L	0.005	0.800	<0.000237	88	3	67.8 - 115.9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2,4,5,6-Tetrachloro-m-xylene	0.000900	0.000900	mg/L	0.005	0.200	90	90	36.1 - 118.9
Deca chlorobiphenyl	0.000840	0.000860	mg/L	0.005	0.200	84	86	51.4 - 124.8

Matrix Spike (MS-1) QC Batch: 10842

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
alpha-BHC	[1,2]	0.000980	0.000990	mg/L	0.005	0.200	<0.0000247	98	1	43.8 - 114.7	20
gamma-BHC (Lindane)		0.000980	0.00100	mg/L	0.005	0.200	<0.0000204	98	2	47.7 - 116	20
beta-BHC		0.000990	0.00100	mg/L	0.005	0.200	<0.0000265	99	1	62.7 - 119	20
Heptachlor		0.000990	0.00100	mg/L	0.005	0.200	<0.0000193	99	1	48.5 - 127.6	20
delta-BHC		0.000980	0.00100	mg/L	0.005	0.200	<0.0000199	98	2	50 - 129.2	20
Aldrin		0.000950	0.000960	mg/L	0.005	0.200	<0.0000191	95	1	55.5 - 114.8	20
Heptachlor Epoxide		0.000940	0.000950	mg/L	0.005	0.200	<0.0000218	94	1	18.6 - 132.6	20
gamma-Chlordane		0.000900	0.000910	mg/L	0.005	0.200	<0.0000192	90	1	62.4 - 116.4	20
alpha-Chlordane		0.000910	0.000920	mg/L	0.005	0.200	<0.0000213	91	1	60.6 - 116.8	20
Endosulfan I		0.000930	0.000940	mg/L	0.005	0.200	<0.0000216	93	1	0 - 172.5	20
p,p-DDE		0.00100	0.00100	mg/L	0.005	0.200	<0.0000210	100	0	62.9 - 129.9	20
Dieldrin		0.000970	0.000980	mg/L	0.005	0.200	<0.0000228	97	1	0 - 174.1	20
Endrin		0.000940	0.00110	mg/L	0.005	0.200	<0.0000234	94	16	0 - 189	20
p,p-DDD		0.000960	0.000840	mg/L	0.005	0.200	<0.0000218	96	13	0 - 181.8	20
Endosulfan II		0.000860	0.000870	mg/L	0.005	0.200	<0.0000231	86	1	0 - 183.9	20
p,p-DDT		0.000970	0.000980	mg/L	0.005	0.200	<0.0000224	97	1	0 - 179.1	20
Endrin aldehyde		0.000800	0.000800	mg/L	0.005	0.200	<0.0000220	80	0	0 - 194.3	20
Endosulfan sulfate	[3,4]	0.00100	0.00100	mg/L	0.005	0.200	<0.00000994	100	0	0 - 137.2	20
Methoxychlor		0.00110	0.00120	mg/L	0.005	0.200	<0.0000234	110	9	24.1 - 162.2	20
Endrin Ketone		0.000910	0.000930	mg/L	0.005	0.200	<0.0000240	91	2	0 - 189.1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2,4,5,6-Tetrachloro-m-xylene	0.00100	0.00100	mg/L	0.005	0.2	100	100	36.1 - 118.9
Deca chlorobiphenyl	0.000900	0.000910	mg/L	0.005	0.2	90	91	51.4 - 124.8

Standard (ICV-1) QC Batch: 10842

[1]Recovery is out of control limits due to unknown anomaly, but within method limits. LCS and LCSD show the method to be in control.
[2]Recovery is out of control limits due to unknown anomaly, but within method limits. LCS and LCSD show the method to be in control.
[3]Recovery is out of control limits due to unknown anomaly, but within method limits. LCS and LCSD show the method to be in control.
[4]Recovery is out of control limits due to unknown anomaly, but within method limits. LCS and LCSD show the method to be in control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.100	0.110	110	85 - 115	2004-07-05
gamma-BHC (Lindane)		mg/L	0.100	0.101	101	85 - 115	2004-07-05
beta-BHC		mg/L	0.100	0.105	105	85 - 115	2004-07-05
Heptachlor		mg/L	0.100	0.108	108	85 - 115	2004-07-05
delta-BHC		mg/L	0.100	0.0987	99	85 - 115	2004-07-05
Aldrin		mg/L	0.100	0.0974	97	85 - 115	2004-07-05
Heptachlor Epoxide		mg/L	0.100	0.114	114	85 - 115	2004-07-05
gamma-Chlordane		mg/L	0.100	0.106	106	85 - 115	2004-07-05
alpha-Chlordane		mg/L	0.100	0.106	106	85 - 115	2004-07-05
Endosulfan I		mg/L	0.100	0.111	111	85 - 115	2004-07-05
p,p-DDE		mg/L	0.100	0.107	107	85 - 115	2004-07-05
Dieldrin		mg/L	0.100	0.108	108	85 - 115	2004-07-05
Endrin		mg/L	0.100	0.113	113	85 - 115	2004-07-05
p,p-DDD		mg/L	0.100	0.100	100	85 - 115	2004-07-05
Endosulfan II		mg/L	0.100	0.101	101	85 - 115	2004-07-05
p,p-DDT		mg/L	0.100	0.105	105	85 - 115	2004-07-05
Endrin aldehyde		mg/L	0.100	0.101	101	85 - 115	2004-07-05
Endosulfan sulfate		mg/L	0.100	0.105	105	85 - 115	2004-07-05
Methoxychlor		mg/L	0.100	0.103	103	85 - 115	2004-07-05
Endrin Ketone		mg/L	0.100	0.101	101	85 - 115	2004-07-05
Toxaphene		mg/L	0.800	0.852	106	85 - 115	2004-07-05
Technical Chlordane		mg/L	0.800	0.890	111	85 - 115	2004-07-05

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.110	mg/L	1	0.100	110	85 - 115
Deca chlorobiphenyl		0.0962	mg/L	1	0.100	96	85 - 115

Standard (CCV-1) QC Batch: 10842

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.100	0.106	106	85 - 115	2004-07-05
gamma-BHC (Lindane)		mg/L	0.100	0.0945	94	85 - 115	2004-07-05
beta-BHC		mg/L	0.100	0.101	101	85 - 115	2004-07-05
Heptachlor		mg/L	0.100	0.103	103	85 - 115	2004-07-05
delta-BHC		mg/L	0.100	0.103	103	85 - 115	2004-07-05
Aldrin		mg/L	0.100	0.0924	92	85 - 115	2004-07-05
Heptachlor Epoxide		mg/L	0.100	0.103	103	85 - 115	2004-07-05
gamma-Chlordane		mg/L	0.100	0.0902	90	85 - 115	2004-07-05
alpha-Chlordane		mg/L	0.100	0.0967	97	85 - 115	2004-07-05
Endosulfan I		mg/L	0.100	0.104	104	85 - 115	2004-07-05
p,p-DDE		mg/L	0.100	0.102	102	85 - 115	2004-07-05
Dieldrin		mg/L	0.100	0.0989	99	85 - 115	2004-07-05
Endrin		mg/L	0.100	0.105	105	85 - 115	2004-07-05
p,p-DDD		mg/L	0.100	0.0993	99	85 - 115	2004-07-05
Endosulfan II		mg/L	0.100	0.0917	92	85 - 115	2004-07-05
p,p-DDT		mg/L	0.100	0.0949	95	85 - 115	2004-07-05
Endrin aldehyde		mg/L	0.100	0.0891	89	85 - 115	2004-07-05
Endosulfan sulfate		mg/L	0.100	0.110	110	85 - 115	2004-07-05

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Methoxychlor		mg/L	0.100	0.104	104	85 - 115	2004-07-05
Endrin Ketone		mg/L	0.100	0.0994	99	85 - 115	2004-07-05
Toxaphene		mg/L	0.800	0.754	94	85 - 115	2004-07-05
Technical Chlordane		mg/L	0.800	0.902	113	85 - 115	2004-07-05

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.102	mg/L	1	0.100	102	85 - 115
Deca chlorobiphenyl		0.0868	mg/L	1	0.100	87	85 - 115

Standard (ICV-1) QC Batch: 11039

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.100	0.0932	93	85 - 115	2004-07-13
gamma-BHC (Lindane)		mg/L	0.100	0.106	106	85 - 115	2004-07-13
beta-BHC		mg/L	0.100	0.106	106	85 - 115	2004-07-13
Heptachlor		mg/L	0.100	0.0960	96	85 - 115	2004-07-13
delta-BHC		mg/L	0.100	0.0886	89	85 - 115	2004-07-13
Aldrin		mg/L	0.100	0.115	115	85 - 115	2004-07-13
Heptachlor Epoxide		mg/L	0.100	0.107	107	85 - 115	2004-07-13
gamma-Chlordane		mg/L	0.100	0.111	111	85 - 115	2004-07-13
alpha-Chlordane		mg/L	0.100	0.101	101	85 - 115	2004-07-13
Endosulfan I		mg/L	0.100	0.103	103	85 - 115	2004-07-13
p,p-DDE		mg/L	0.100	0.109	109	85 - 115	2004-07-13
Dieldrin		mg/L	0.100	0.111	111	85 - 115	2004-07-13
Endrin		mg/L	0.100	0.106	106	85 - 115	2004-07-13
p,p-DDD		mg/L	0.100	0.0882	88	85 - 115	2004-07-13
Endosulfan II		mg/L	0.100	0.0992	99	85 - 115	2004-07-13
p,p-DDT		mg/L	0.100	0.109	109	85 - 115	2004-07-13
Endrin aldehyde		mg/L	0.100	0.0956	96	85 - 115	2004-07-13
Endosulfan sulfate		mg/L	0.100	0.0922	92	85 - 115	2004-07-13
Methoxychlor		mg/L	0.100	0.0978	98	85 - 115	2004-07-13
Endrin Ketone		mg/L	0.100	0.0880	88	85 - 115	2004-07-13
Toxaphene		mg/L	0.800	0.886	111	85 - 115	2004-07-13
Technical Chlordane		mg/L	0.800	0.793	99	85 - 115	2004-07-13

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.0986	mg/L	1	0.100	99	85 - 115
Deca chlorobiphenyl		0.0850	mg/L	1	0.100	85	85 - 115

Standard (CCV-1) QC Batch: 11039

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.100	0.101	101	85 - 115	2004-07-13

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
gamma-BHC (Lindane)		mg/L	0.100	0.0995	100	85 - 115	2004-07-13
beta-BHC		mg/L	0.100	0.104	104	85 - 115	2004-07-13
Heptachlor		mg/L	0.100	0.106	106	85 - 115	2004-07-13
delta-BHC		mg/L	0.100	0.102	102	85 - 115	2004-07-13
Aldrin		mg/L	0.100	0.0982	98	85 - 115	2004-07-13
Heptachlor Epoxide		mg/L	0.100	0.113	113	85 - 115	2004-07-13
gamma-Chlordane		mg/L	0.100	0.0987	99	85 - 115	2004-07-13
alpha-Chlordane		mg/L	0.100	0.103	103	85 - 115	2004-07-13
Endosulfan I		mg/L	0.100	0.112	112	85 - 115	2004-07-13
p,p-DDE		mg/L	0.100	0.107	107	85 - 115	2004-07-13
Dieldrin		mg/L	0.100	0.102	102	85 - 115	2004-07-13
Endrin		mg/L	0.100	0.110	110	85 - 115	2004-07-13
p,p-DDD		mg/L	0.100	0.0889	89	85 - 115	2004-07-13
Endosulfan II		mg/L	0.100	0.100	100	85 - 115	2004-07-13
p,p-DDT		mg/L	0.100	0.107	107	85 - 115	2004-07-13
Endrin aldehyde		mg/L	0.100	0.0968	97	85 - 115	2004-07-13
Endosulfan sulfate		mg/L	0.100	0.112	112	85 - 115	2004-07-13
Methoxychlor		mg/L	0.100	0.106	106	85 - 115	2004-07-13
Endrin Ketone		mg/L	0.100	0.106	106	85 - 115	2004-07-13
Toxaphene		mg/L	0.800	0.822	103	85 - 115	2004-07-13
Technical Chlordane		mg/L	0.800	0.842	105	85 - 115	2004-07-13

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.109	mg/L	1	0.100	109	85 - 115
Deca chlorobiphenyl		0.0927	mg/L	1	0.100	93	85 - 115

Standard (ICV-1) QC Batch: 11426

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.100	0.0987	99	85 - 115	2004-07-28
gamma-BHC (Lindane)		mg/L	0.100	0.105	105	85 - 115	2004-07-28
beta-BHC		mg/L	0.100	0.103	103	85 - 115	2004-07-28
Heptachlor		mg/L	0.100	0.103	103	85 - 115	2004-07-28
delta-BHC		mg/L	0.100	0.0992	99	85 - 115	2004-07-28
Aldrin		mg/L	0.100	0.0977	98	85 - 115	2004-07-28
Heptachlor Epoxide		mg/L	0.100	0.0988	99	85 - 115	2004-07-28
gamma-Chlordane		mg/L	0.100	0.100	100	85 - 115	2004-07-28
alpha-Chlordane		mg/L	0.100	0.106	106	85 - 115	2004-07-28
Endosulfan I		mg/L	0.100	0.104	104	85 - 115	2004-07-28
p,p-DDE		mg/L	0.100	0.103	103	85 - 115	2004-07-28
Dieldrin		mg/L	0.100	0.103	103	85 - 115	2004-07-28
Endrin		mg/L	0.100	0.105	105	85 - 115	2004-07-28
p,p-DDD		mg/L	0.100	0.0960	96	85 - 115	2004-07-28
Endosulfan II		mg/L	0.100	0.103	103	85 - 115	2004-07-28
p,p-DDT		mg/L	0.100	0.105	105	85 - 115	2004-07-28
Endrin aldehyde		mg/L	0.100	0.104	104	85 - 115	2004-07-28
Endosulfan sulfate		mg/L	0.100	0.109	109	85 - 115	2004-07-28

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Methoxychlor		mg/L	0.100	0.110	110	85 - 115	2004-07-28
Endrin Ketone		mg/L	0.100	0.108	108	85 - 115	2004-07-28
Toxaphene		mg/L	0.800	0.886	111	85 - 115	2004-07-28
Technical Chlordane		mg/L	0.800	0.758	95	85 - 115	2004-07-28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.104	mg/L	1	0.100	104	85 - 115
Deca chlorobiphenyl		0.102	mg/L	1	0.100	102	85 - 115

Standard (CCV-1) QC Batch: 11426

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.100	0.103	103	85 - 115	2004-07-28
gamma-BHC (Lindane)		mg/L	0.100	0.107	107	85 - 115	2004-07-28
beta-BHC		mg/L	0.100	0.106	106	85 - 115	2004-07-28
Heptachlor		mg/L	0.100	0.106	106	85 - 115	2004-07-28
delta-BHC		mg/L	0.100	0.106	106	85 - 115	2004-07-28
Aldrin		mg/L	0.100	0.102	102	85 - 115	2004-07-28
Heptachlor Epoxide		mg/L	0.100	0.0999	100	85 - 115	2004-07-28
gamma-Chlordane		mg/L	0.100	0.0995	100	85 - 115	2004-07-28
alpha-Chlordane		mg/L	0.100	0.106	106	85 - 115	2004-07-28
Endosulfan I		mg/L	0.100	0.105	105	85 - 115	2004-07-28
p,p-DDE		mg/L	0.100	0.104	104	85 - 115	2004-07-28
Dieldrin		mg/L	0.100	0.103	103	85 - 115	2004-07-28
Endrin		mg/L	0.100	0.115	115	85 - 115	2004-07-28
p,p-DDD		mg/L	0.100	0.0909	91	85 - 115	2004-07-28
Endosulfan II		mg/L	0.100	0.102	102	85 - 115	2004-07-28
p,p-DDT		mg/L	0.100	0.105	105	85 - 115	2004-07-28
Endrin aldehyde		mg/L	0.100	0.101	101	85 - 115	2004-07-28
Endosulfan sulfate		mg/L	0.100	0.113	113	85 - 115	2004-07-28
Methoxychlor		mg/L	0.100	0.113	113	85 - 115	2004-07-28
Endrin Ketone		mg/L	0.100	0.114	114	85 - 115	2004-07-28
Toxaphene		mg/L	0.800	0.748	94	85 - 115	2004-07-28
Technical Chlordane		mg/L	0.800	0.766	96	85 - 115	2004-07-28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.109	mg/L	1	0.100	109	85 - 115
Deca chlorobiphenyl		0.100	mg/L	1	0.100	100	85 - 115

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	10793	Date Analyzed:	2004-06-30	Analyzed By:	MK
Prep Batch:	9546	Date Prepared:	2004-06-30	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.48	s.u.	1	0.00

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	10817	Date Analyzed:	2004-07-01	Analyzed By:	MK
Prep Batch:	9560	Date Prepared:	2004-07-01	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.45	s.u.	1	0.00

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11041	Date Analyzed:	2004-07-07	Analyzed By:	JR
Prep Batch:	9759	Date Prepared:	2004-07-07	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.37	s.u.	1	0.00

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11334	Date Analyzed:	2004-07-20	Analyzed By:	MK
Prep Batch:	10022	Date Prepared:	2004-07-20	Prepared By:	MK

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.59	s.u.	1	0.00

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11338	Date Analyzed:	2004-07-21	Analyzed By:	JG
Prep Batch:	10024	Date Prepared:	2004-07-21	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.46	s.u.	1	0.00

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	11338	Date Analyzed:	2004-07-21	Analyzed By:	JG
Prep Batch:	10024	Date Prepared:	2004-07-21	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.47	s.u.	1	0.00

Duplicate (1) QC Batch: 10793

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	6.98	6.98	s.u.	1	0	

Duplicate (1) QC Batch: 10817

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.45	7.45	s.u.	1	0	

Duplicate (1) QC Batch: 11041

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.24	7.22	s.u.	1	0	

Duplicate (1) QC Batch: 11334

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.58	7.59	s.u.	1	0	

Duplicate (1) QC Batch: 11338

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.48	7.47	s.u.	1	0	

Standard (ICV-1) QC Batch: 10793

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.93	99	98 - 102	2004-06-30

Standard (CCV-1) QC Batch: 10793

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.95	99	98 - 102	2004-06-30

Standard (ICV-1) QC Batch: 10817

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.93	99	98 - 102	2004-07-01

Standard (CCV-1) QC Batch: 10817

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.98	100	98 - 102	2004-07-01

Standard (ICV-1) QC Batch: 11041

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.95	99	98 - 102	2004-07-07

Standard (CCV-1) QC Batch: 11041

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.97	100	98 - 102	2004-07-07

Standard (ICV-1) QC Batch: 11334

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.01	100	98 - 102	2004-07-20

Standard (CCV-1) QC Batch: 11334

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.96	99	98 - 102	2004-07-20

Standard (ICV-1) QC Batch: 11338

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.95	99	98 - 102	2004-07-21

Standard (CCV-1) QC Batch: 11338

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.92	99	98 - 102	2004-07-21

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 20, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 29 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	10988	Date Analyzed:	2004-07-11	Analyzed By:	RC
Prep Batch:	9713	Date Prepared:	2004-07-05	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol	[1]	<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00

continued . . .

[1] alpha-terpineol <0.005

sample 37745 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0270	mg/L	0.001	80.0	34	0 - 69.3
Phenol-d5		0.0168	mg/L	0.001	80.0	21	0 - 52.5
Nitrobenzene-d5		0.0410	mg/L	0.001	80.0	51	21.1 - 93.6
2-Fluorobiphenyl		0.0383	mg/L	0.001	80.0	48	25.4 - 87
2,4,6-Tribromophenol		0.0412	mg/L	0.001	80.0	52	14.9 - 110
Terphenyl-d14		0.0548	mg/L	0.001	80.0	68	28.9 - 124

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	10988	Date Analyzed:	2004-07-11	Analyzed By:	RC
Prep Batch:	9713	Date Prepared:	2004-07-05	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 37911 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 37911 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0234	mg/L	0.001	80.0	29	0 - 69.3
Phenol-d5		0.0148	mg/L	0.001	80.0	18	0 - 52.5
Nitrobenzene-d5		0.0356	mg/L	0.001	80.0	44	21.1 - 93.6
2-Fluorobiphenyl		0.0347	mg/L	0.001	80.0	43	25.4 - 87
2,4,6-Tribromophenol		0.0401	mg/L	0.001	80.0	50	14.9 - 110
Terphenyl-d14		0.0565	mg/L	0.001	80.0	71	28.9 - 124

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	10990	Date Analyzed:	2004-07-11	Analyzed By:	RC
Prep Batch:	9717	Date Prepared:	2004-07-11	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00

continued . . .

sample 38118 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0

continued . . .

sample 38118 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0229	mg/L	0.001	80.0	29	0 - 69.3
Phenol-d5		0.0150	mg/L	0.001	80.0	19	0 - 52.5
Nitrobenzene-d5		0.0336	mg/L	0.001	80.0	42	21.1 - 93.6
2-Fluorobiphenyl		0.0307	mg/L	0.001	80.0	38	25.4 - 87
2,4,6-Tribromophenol		0.0397	mg/L	0.001	80.0	50	14.9 - 110
Terphenyl-d14		0.0590	mg/L	0.001	80.0	74	28.9 - 124

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11246	Date Analyzed:	2004-07-21	Analyzed By:	RC
Prep Batch:	9948	Date Prepared:	2004-07-21	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00

continued . . .

sample 39196 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00

continued . . .

sample 39196 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0183	mg/L	0.001	80.0	23	0 - 69.3
Phenol-d5		0.0119	mg/L	0.001	80.0	15	0 - 52.5
Nitrobenzene-d5		0.0299	mg/L	0.001	80.0	37	21.1 - 93.6
2-Fluorobiphenyl		0.0304	mg/L	0.001	80.0	38	25.4 - 87
2,4,6-Tribromophenol		0.0368	mg/L	0.001	80.0	46	14.9 - 110
Terphenyl-d14		0.0337	mg/L	0.001	80.0	42	28.9 - 124

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11291	Date Analyzed:	2004-07-25	Analyzed By:	RC
Prep Batch:	9988	Date Prepared:	2004-07-25	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00

continued . . .

sample 39334 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 39334 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0354	mg/L	0.001	80.0	44	0 - 69.3
Phenol-d5		0.0229	mg/L	0.001	80.0	29	0 - 52.5
Nitrobenzene-d5		0.0521	mg/L	0.001	80.0	65	21.1 - 93.6
2-Fluorobiphenyl		0.0555	mg/L	0.001	80.0	69	25.4 - 87
2,4,6-Tribromophenol		0.0600	mg/L	0.001	80.0	75	14.9 - 110
Terphenyl-d14		0.0553	mg/L	0.001	80.0	69	28.9 - 124

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	11291	Date Analyzed:	2004-07-25	Analyzed By:	RC
Prep Batch:	9988	Date Prepared:	2004-07-25	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	0.001	5.00
n-Nitrosodimethylamine		<0.00500	mg/L	0.001	5.00
2-Picoline		<0.00500	mg/L	0.001	5.00
Methyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Ethyl methanesulfonate		<0.00500	mg/L	0.001	5.00
Phenol		<0.00500	mg/L	0.001	5.00
Aniline		<0.00500	mg/L	0.001	5.00
bis(2-chloroethyl)ether		<0.00500	mg/L	0.001	5.00
2-Chlorophenol		<0.00500	mg/L	0.001	5.00
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.001	5.00
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.001	5.00
Benzyl alcohol		<0.00500	mg/L	0.001	5.00
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.001	5.00
2-Methylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.001	5.00
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.001	5.00
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.001	5.00
Hexachloroethane		<0.00500	mg/L	0.001	5.00
Acetophenone		<0.00500	mg/L	0.001	5.00
Nitrobenzene		<0.00500	mg/L	0.001	5.00
n-Nitrosopiperidine		<0.00500	mg/L	0.001	5.00
Isophorone		<0.00500	mg/L	0.001	5.00
2-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dimethylphenol		<0.00500	mg/L	0.001	5.00
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.001	5.00
2,4-Dichlorophenol		<0.00500	mg/L	0.001	5.00
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.001	5.00
Benzoic acid		<0.0200	mg/L	0.001	20.0
Naphthalene		<0.00500	mg/L	0.001	5.00
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.001	5.00
4-Chloroaniline		<0.00500	mg/L	0.001	5.00
2,6-Dichlorophenol		<0.00500	mg/L	0.001	5.00
Hexachlorobutadiene		<0.00500	mg/L	0.001	5.00
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.001	5.00
4-Chloro-3-methylphenol		<0.00500	mg/L	0.001	5.00
2-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1-Methylnaphthalene		<0.00500	mg/L	0.001	5.00
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.001	5.00
Hexachlorocyclopentadiene		<0.00500	mg/L	0.001	5.00
2,4,6-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2,4,5-Trichlorophenol		<0.00500	mg/L	0.001	5.00
2-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
1-Chloronaphthalene		<0.00500	mg/L	0.001	5.00
2-Nitroaniline		<0.00500	mg/L	0.001	5.00
Dimethylphthalate		<0.00500	mg/L	0.001	5.00
Acenaphthylene		<0.00500	mg/L	0.001	5.00
2,6-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
3-Nitroaniline		<0.00500	mg/L	0.001	5.00
Acenaphthene		<0.00500	mg/L	0.001	5.00

continued . . .

sample 39336 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dinitrophenol		<0.0200	mg/L	0.001	20.0
Dibenzofuran		<0.00500	mg/L	0.001	5.00
Pentachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Nitrophenol		<0.00500	mg/L	0.001	5.00
2,4-Dinitrotoluene		<0.00500	mg/L	0.001	5.00
1-Naphthylamine		<0.00500	mg/L	0.001	5.00
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.001	5.00
2-Naphthylamine		<0.00500	mg/L	0.001	5.00
Fluorene		<0.00500	mg/L	0.001	5.00
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Diethylphthalate		<0.00500	mg/L	0.001	5.00
4-Nitroaniline		<0.00500	mg/L	0.001	5.00
Diphenylhydrazine		<0.00500	mg/L	0.001	5.00
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.001	5.00
Diphenylamine		<0.00500	mg/L	0.001	5.00
4-Bromophenyl-phenylether		<0.00500	mg/L	0.001	5.00
Phenacetin		<0.00500	mg/L	0.001	5.00
Hexachlorobenzene		<0.00500	mg/L	0.001	5.00
4-Aminobiphenyl		<0.00500	mg/L	0.001	5.00
Pentachlorophenol		<0.00500	mg/L	0.001	5.00
Anthracene		<0.00500	mg/L	0.001	5.00
Pentachloronitrobenzene		<0.00500	mg/L	0.001	5.00
Pronamide		<0.00500	mg/L	0.001	5.00
Phenanthrene		<0.00500	mg/L	0.001	5.00
Di-n-butylphthalate		<0.00500	mg/L	0.001	5.00
Fluoranthene		<0.00500	mg/L	0.001	5.00
Benzidine		<0.0150	mg/L	0.001	15.0
Pyrene		<0.00500	mg/L	0.001	5.00
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.001	5.00
Butylbenzylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(a)anthracene		<0.00500	mg/L	0.001	5.00
3,3-Dichlorobenzidine		<0.00500	mg/L	0.001	5.00
Chrysene		<0.00500	mg/L	0.001	5.00
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.001	10.0
Di-n-octylphthalate		<0.00500	mg/L	0.001	5.00
Benzo(b)fluoranthene		<0.00500	mg/L	0.001	5.00
Benzo(k)fluoranthene		<0.00500	mg/L	0.001	5.00
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(a)pyrene		<0.00500	mg/L	0.001	5.00
3-Methylcholanthrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,j)acridine		<0.00500	mg/L	0.001	5.00
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.001	5.00
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.001	5.00
Benzo(g,h,i)perylene		<0.00500	mg/L	0.001	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0221	mg/L	0.001	80.0	28	0 - 69.3
Phenol-d5		0.0144	mg/L	0.001	80.0	18	0 - 52.5
Nitrobenzene-d5		0.0325	mg/L	0.001	80.0	41	21.1 - 93.6
2-Fluorobiphenyl		0.0336	mg/L	0.001	80.0	42	25.4 - 87

continued . . .

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,6-Tribromophenol		0.0362	mg/L	0.001	80.0	45	14.9 - 110
Terphenyl-d14		0.0317	mg/L	0.001	80.0	40	28.9 - 124

Method Blank (1) QC Batch: 10988

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol	[2]	<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5

continued . . .

[2] alpha-Terpineol <0.005

method blank continued . . .

Parameter	Flag	Result	Units	RL
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0266	mg/L	0.001	80.0	33	0 - 69.3
Phenol-d5		0.0179	mg/L	0.001	80.0	22	0 - 52.5
Nitrobenzene-d5		0.0420	mg/L	0.001	80.0	52	21.1 - 93.6
2-Fluorobiphenyl		0.0423	mg/L	0.001	80.0	53	25.4 - 87
2,4,6-Tribromophenol		0.0461	mg/L	0.001	80.0	58	14.9 - 110
Terphenyl-d14		0.0710	mg/L	0.001	80.0	89	28.9 - 124

Method Blank (1) QC Batch: 10990

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0266	mg/L	0.001	80.0	33	0 - 69.3
Phenol-d5		0.0179	mg/L	0.001	80.0	22	0 - 52.5
Nitrobenzene-d5		0.0420	mg/L	0.001	80.0	52	21.1 - 93.6
2-Fluorobiphenyl		0.0423	mg/L	0.001	80.0	53	25.4 - 87
2,4,6-Tribromophenol		0.0461	mg/L	0.001	80.0	58	14.9 - 110
Terphenyl-d14		0.0710	mg/L	0.001	80.0	89	28.9 - 124

Method Blank (1) QC Batch: 11246

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.00562	mg/L	0.001	80.0	7	0 - 69.3
Phenol-d5		0.00540	mg/L	0.001	80.0	7	0 - 52.5
Nitrobenzene-d5		0.0189	mg/L	0.001	80.0	24	21.1 - 93.6
2-Fluorobiphenyl	[3]	0.0181	mg/L	0.001	80.0	23	25.4 - 87
2,4,6-Tribromophenol		0.0155	mg/L	0.001	80.0	19	14.9 - 110
Terphenyl-d14		0.0256	mg/L	0.001	80.0	32	28.9 - 124

Method Blank (1) QC Batch: 11291

Parameter	Flag	Result	Units	RL
Pyridine		<0.00500	mg/L	5
n-Nitrosodimethylamine		<0.00500	mg/L	5
2-Picoline		<0.00500	mg/L	5
Methyl methanesulfonate		<0.00500	mg/L	5
Ethyl methanesulfonate		<0.00500	mg/L	5
Phenol		<0.00500	mg/L	5
Aniline		<0.00500	mg/L	5
bis(2-chloroethyl)ether		<0.00500	mg/L	5
2-Chlorophenol		<0.00500	mg/L	5
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	5
1,4-Dichlorobenzene (para)		<0.00500	mg/L	5
Benzyl alcohol		<0.00500	mg/L	5
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	5
2-Methylphenol		<0.00500	mg/L	5
bis(2-chloroisopropyl)ether		<0.00500	mg/L	5
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	5
n-Nitrosodi-n-propylamine		<0.00500	mg/L	5
Hexachloroethane		<0.00500	mg/L	5
Acetophenone		<0.00500	mg/L	5
Nitrobenzene		<0.00500	mg/L	5
n-Nitrosopiperidine		<0.00500	mg/L	5
Isophorone		<0.00500	mg/L	5
2-Nitrophenol		<0.00500	mg/L	5
2,4-Dimethylphenol		<0.00500	mg/L	5
bis(2-chloroethoxy)methane		<0.00500	mg/L	5
2,4-Dichlorophenol		<0.00500	mg/L	5
1,2,4-Trichlorobenzene		<0.00500	mg/L	5
Benzoic acid		<0.0200	mg/L	20
Naphthalene		<0.00500	mg/L	5

continued . . .

[3]Other surrogates show extraction occurred properly.

method blank continued . . .

Parameter	Flag	Result	Units	RL
a,a-Dimethylphenethylamine		<0.00500	mg/L	5
4-Chloroaniline		<0.00500	mg/L	5
2,6-Dichlorophenol		<0.00500	mg/L	5
Hexachlorobutadiene		<0.00500	mg/L	5
n-Nitroso-di-n-butylamine		<0.00500	mg/L	5
4-Chloro-3-methylphenol		<0.00500	mg/L	5
2-Methylnaphthalene		<0.00500	mg/L	5
1-Methylnaphthalene		<0.00500	mg/L	5
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	5
Hexachlorocyclopentadiene		<0.00500	mg/L	5
2,4,6-Trichlorophenol		<0.00500	mg/L	5
2,4,5-Trichlorophenol		<0.00500	mg/L	5
2-Chloronaphthalene		<0.00500	mg/L	5
1-Chloronaphthalene		<0.00500	mg/L	5
2-Nitroaniline		<0.00500	mg/L	5
Dimethylphthalate		<0.00500	mg/L	5
Acenaphthylene		<0.00500	mg/L	5
2,6-Dinitrotoluene		<0.00500	mg/L	5
3-Nitroaniline		<0.00500	mg/L	5
Acenaphthene		<0.00500	mg/L	5
2,4-Dinitrophenol		<0.0200	mg/L	20
Dibenzofuran		<0.00500	mg/L	5
Pentachlorobenzene		<0.00500	mg/L	5
4-Nitrophenol		<0.00500	mg/L	5
2,4-Dinitrotoluene		<0.00500	mg/L	5
1-Naphthylamine		<0.00500	mg/L	5
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	5
2-Naphthylamine		<0.00500	mg/L	5
Fluorene		<0.00500	mg/L	5
4-Chlorophenyl-phenylether		<0.00500	mg/L	5
Diethylphthalate		<0.00500	mg/L	5
4-Nitroaniline		<0.00500	mg/L	5
Diphenylhydrazine		<0.00500	mg/L	5
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	5
Diphenylamine		<0.00500	mg/L	5
4-Bromophenyl-phenylether		<0.00500	mg/L	5
Phenacetin		<0.00500	mg/L	5
Hexachlorobenzene		<0.00500	mg/L	5
4-Aminobiphenyl		<0.00500	mg/L	5
Pentachlorophenol		<0.00500	mg/L	5
Anthracene		<0.00500	mg/L	5
Pentachloronitrobenzene		<0.00500	mg/L	5
Pronamide		<0.00500	mg/L	5
Phenanthrene		<0.00500	mg/L	5
Di-n-butylphthalate		<0.00500	mg/L	5
Fluoranthene		<0.00500	mg/L	5
Benzidine		<0.0150	mg/L	15
Pyrene		<0.00500	mg/L	5
p-Dimethylaminoazobenzene		<0.00500	mg/L	5
Butylbenzylphthalate		<0.00500	mg/L	5
Benzo(a)anthracene		<0.00500	mg/L	5
3,3-Dichlorobenzidine		<0.00500	mg/L	5

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Chrysene		<0.00500	mg/L	5
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	10
Di-n-octylphthalate		<0.00500	mg/L	5
Benzo(b)fluoranthene		<0.00500	mg/L	5
Benzo(k)fluoranthene		<0.00500	mg/L	5
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	5
Benzo(a)pyrene		<0.00500	mg/L	5
3-Methylcholanthrene		<0.00500	mg/L	5
Dibenzo(a,j)acridine		<0.00500	mg/L	5
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	5
Dibenzo(a,h)anthracene		<0.00500	mg/L	5
Benzo(g,h,i)perylene		<0.00500	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.00554	mg/L	0.001	80.0	7	0 - 69.3
Phenol-d5		0.00557	mg/L	0.001	80.0	7	0 - 52.5
Nitrobenzene-d5		0.0188	mg/L	0.001	80.0	24	21.1 - 93.6
2-Fluorobiphenyl	[4]	0.0177	mg/L	0.001	80.0	22	25.4 - 87
2,4,6-Tribromophenol		0.0158	mg/L	0.001	80.0	20	14.9 - 110
Terphenyl-d14		0.0266	mg/L	0.001	80.0	33	28.9 - 124

Laboratory Control Spike (LCS-1) QC Batch: 10988

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	12.5	12.7	mg/L	1	80.0	<0.490	16	2	0 - 52.1	20
2-Chlorophenol	30.5	30.8	mg/L	1	80.0	<1.63	38	1	9.7 - 98.2	20
1,4-Dichlorobenzene (para)	32.1	32.0	mg/L	1	80.0	<1.93	40	0	18.1 - 111	20
n-Nitrosodi-n-propylamine	33.9	34.3	mg/L	1	80.0	<2.26	42	1	36.6 - 121	20
1,2,4-Trichlorobenzene	33.5	33.9	mg/L	1	80.0	<1.52	42	1	20.8 - 112	20
4-Chloro-3-methylphenol	34.7	33.8	mg/L	1	80.0	<1.60	43	3	14.3 - 102	20
Acenaphthene	34.6	34.5	mg/L	1	80.0	<1.58	43	0	32.6 - 123	20
4-Nitrophenol	<3.83	<3.83	mg/L	1	80.0	<3.83	0	0	0 - 51.9	20
2,4-Dinitrotoluene	40.4	41.0	mg/L	1	80.0	<2.09	50	1	32.6 - 138	20
Pentachlorophenol	30.8	30.5	mg/L	1	80.0	<3.04	38	1	0 - 121	20
Pyrene	54.6	54.1	mg/L	1	80.0	<1.81	68	1	38.4 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	22.2	22.3	mg/L	1	80.0	28	28	0 - 69.3
Phenol-d5	14.3	14.3	mg/L	1	80.0	18	18	0 - 52.5
Nitrobenzene-d5	33.0	33.5	mg/L	1	80.0	41	42	21.1 - 93.6
2-Fluorobiphenyl	34.3	34.6	mg/L	1	80.0	43	43	25.4 - 87
2,4,6-Tribromophenol	39.8	40.0	mg/L	1	80.0	50	50	14.9 - 110
Terphenyl-d14	59.0	57.9	mg/L	1	80.0	74	72	28.9 - 124

[4]Other surrogates show extraction occurred properly.

Laboratory Control Spike (LCS-1) QC Batch: 10990

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	12.5	12.7	mg/L	1	80.0	<0.490	16	2	0 - 52.1	20
2-Chlorophenol	30.5	30.8	mg/L	1	80.0	<1.63	38	1	9.7 - 98.2	20
1,4-Dichlorobenzene (para)	32.1	32.0	mg/L	1	80.0	<1.93	40	0	18.1 - 111	20
n-Nitrosodi-n-propylamine	33.9	34.3	mg/L	1	80.0	<2.26	42	1	36.6 - 121	20
1,2,4-Trichlorobenzene	33.5	33.9	mg/L	1	80.0	<1.52	42	1	20.8 - 112	20
4-Chloro-3-methylphenol	34.7	33.8	mg/L	1	80.0	<1.60	43	3	14.3 - 102	20
Acenaphthene	34.6	34.5	mg/L	1	80.0	<1.58	43	0	32.6 - 123	20
4-Nitrophenol	<3.83	<3.83	mg/L	1	80.0	<3.83	0	0	0 - 51.9	20
2,4-Dinitrotoluene	40.4	41.0	mg/L	1	80.0	<2.09	50	1	32.6 - 138	20
Pentachlorophenol	30.8	30.5	mg/L	1	80.0	<3.04	38	1	0 - 121	20
Pyrene	54.6	54.1	mg/L	1	80.0	<1.81	68	1	38.4 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	22.2	22.3	mg/L	1	80.0	28	28	0 - 69.3
Phenol-d5	14.3	14.3	mg/L	1	80.0	18	18	0 - 52.5
Nitrobenzene-d5	33.0	33.5	mg/L	1	80.0	41	42	21.1 - 93.6
2-Fluorobiphenyl	34.3	34.6	mg/L	1	80.0	43	43	25.4 - 87
2,4,6-Tribromophenol	39.8	40.0	mg/L	1	80.0	50	50	14.9 - 110
Terphenyl-d14	59.0	57.9	mg/L	1	80.0	74	72	28.9 - 124

Laboratory Control Spike (LCS-1) QC Batch: 11246

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol		11.7	11.5	mg/L	1	80.0	<0.490	15	2	0 - 52.1	20
2-Chlorophenol		27.4	27.3	mg/L	1	80.0	<1.63	34	0	9.7 - 98.2	20
1,4-Dichlorobenzene (para)	[5][6]	11.2	11.1	mg/L	1	80.0	<1.93	14	1	18.1 - 111	20
n-Nitrosodi-n-propylamine	[7][8]	15.1	14.4	mg/L	1	80.0	<2.26	19	5	36.6 - 121	20
1,2,4-Trichlorobenzene	[9][10]	12.5	12.2	mg/L	1	80.0	<1.52	16	2	20.8 - 112	20
4-Chloro-3-methylphenol		29.6	28.1	mg/L	1	80.0	<1.60	37	5	14.3 - 102	20
Acenaphthene		43.7	42.8	mg/L	1	80.0	<1.58	55	2	32.6 - 123	20
4-Nitrophenol		<3.83	<3.83	mg/L	1	80.0	<3.83	0	0	0 - 51.9	20
2,4-Dinitrotoluene	[11][12]	15.0	14.4	mg/L	1	80.0	<2.09	19	4	32.6 - 138	20
Pentachlorophenol		47.5	43.9	mg/L	1	80.0	<3.04	59	8	0 - 121	20
Pyrene		46.4	45.4	mg/L	1	80.0	<1.81	58	2	38.4 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued . . .

[5]The average of the spike compounds shows that the process is in control.
[6]The average of the spike compounds shows that the process is in control.
[7]The average of the spike compounds shows that the process is in control.
[8]The average of the spike compounds shows that the process is in control.
[9]The average of the spike compounds shows that the process is in control.
[10]The average of the spike compounds shows that the process is in control.
[11]The average of the spike compounds shows that the process is in control.
[12]The average of the spike compounds shows that the process is in control.

control spikes continued . . .

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	18.8	19.1	mg/L	1	80.0	24	24	0 - 69.3
Phenol-d5	12.8	12.7	mg/L	1	80.0	16	16	0 - 52.5
Nitrobenzene-d5	28.2	27.7	mg/L	1	80.0	35	35	21.1 - 93.6
2-Fluorobiphenyl	29.5	28.8	mg/L	1	80.0	37	36	25.4 - 87
2,4,6-Tribromophenol	36.6	35.0	mg/L	1	80.0	46	44	14.9 - 110
Terphenyl-d14	33.5	32.7	mg/L	1	80.0	42	41	28.9 - 124

Laboratory Control Spike (LCS-1) QC Batch: 11291

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol		11.4	11.3	mg/L	1	80.0	<0.490	14	1	0 - 52.1	20
2-Chlorophenol		27.4	26.8	mg/L	1	80.0	<1.63	34	2	9.7 - 98.2	20
1,4-Dichlorobenzene (para)	[13][14]	11.2	11.0	mg/L	1	80.0	<1.93	14	2	18.1 - 111	20
n-Nitrosodi-n-propylamine	[15][16]	14.8	14.5	mg/L	1	80.0	<2.26	18	2	36.6 - 121	20
1,2,4-Trichlorobenzene	[17][18]	12.5	12.2	mg/L	1	80.0	<1.52	16	2	20.8 - 112	20
4-Chloro-3-methylphenol		28.6	28.4	mg/L	1	80.0	<1.60	36	1	14.3 - 102	20
Acenaphthene		43.6	42.7	mg/L	1	80.0	<1.58	54	2	32.6 - 123	20
4-Nitrophenol		<3.83	<3.83	mg/L	1	80.0	<3.83	0	0	0 - 51.9	20
2,4-Dinitrotoluene	[19][20]	15.2	14.9	mg/L	1	80.0	<2.09	19	2	32.6 - 138	20
Pentachlorophenol		54.1	52.0	mg/L	1	80.0	<3.04	68	4	0 - 121	20
Pyrene		47.9	47.5	mg/L	1	80.0	<1.81	60	1	38.4 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	19.2	19.0	mg/L	1	80.0	24	24	0 - 69.3
Phenol-d5	12.6	12.5	mg/L	1	80.0	16	16	0 - 52.5
Nitrobenzene-d5	27.9	27.7	mg/L	1	80.0	35	35	21.1 - 93.6
2-Fluorobiphenyl	29.2	28.8	mg/L	1	80.0	36	36	25.4 - 87
2,4,6-Tribromophenol	38.1	37.1	mg/L	1	80.0	48	46	14.9 - 110
Terphenyl-d14	35.1	34.7	mg/L	1	80.0	44	43	28.9 - 124

Matrix Spike (MS-1) QC Batch: 11246

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol	12.7	12.8	mg/L	1	80.0	<0.490	16	1	0 - 59.4	

continued . . .

[13]The average of the spike compounds shows that the process is in control.
[14]The average of the spike compounds shows that the process is in control.
[15]The average of the spike compounds shows that the process is in control.
[16]The average of the spike compounds shows that the process is in control.
[17]The average of the spike compounds shows that the process is in control.
[18]The average of the spike compounds shows that the process is in control.
[19]The average of the spike compounds shows that the process is in control.
[20]The average of the spike compounds shows that the process is in control.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
2-Chlorophenol		32.8	32.6	mg/L	1	80.0	<1.63	41	1	33.87 - 76.65	
1,4-Dichlorobenzene (para)		13.3	13.3	mg/L	1	80.0	<1.93	17	0	5.66 - 106.63	
n-Nitrosodi-n-propylamine		16.2	16.1	mg/L	1	80.0	<2.26	20	1	2.12 - 116.53	
1,2,4-Trichlorobenzene		14.8	14.5	mg/L	1	80.0	<1.52	18	2	8.26 - 101.73	
4-Chloro-3-methylphenol	[21][22]	35.3	34.3	mg/L	1	80.0	<1.60	44	3	49.08 - 66.06	
Acenaphthene		48.2	47.8	mg/L	1	80.0	<1.58	60	1	10.76 - 107.89	
4-Nitrophenol		<3.83	<3.83	mg/L	1	80.0	<3.83	0	0	0 - 70.4	
2,4-Dinitrotoluene		16.2	15.5	mg/L	1	80.0	<2.09	20	4	0 - 140	
Pentachlorophenol		60.7	60.0	mg/L	1	80.0	<3.04	76	1	0 - 121	
Pyrene		47.5	47.6	mg/L	1	80.0	<1.81	59	0	13.81 - 106.27	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol		19.0	18.8	mg/L	1	80	24	24	7.07 - 72.13
Phenol-d5		12.2	12.3	mg/L	1	80	15	15	0 - 67.01
Nitrobenzene-d5		30.6	30.6	mg/L	1	80	38	38	32.4 - 110.8
2-Fluorobiphenyl	[23][24]	32.5	32.6	mg/L	1	80	41	41	46.84 - 91.48
2,4,6-Tribromophenol		40.1	39.2	mg/L	1	80	50	49	29.39 - 110.7
Terphenyl-d14		33.9	33.7	mg/L	1	80	42	42	34.1 - 95.34

Matrix Spike (MS-1) QC Batch: 11291

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Phenol		13.0	13.1	mg/L	1	80.0	<0.490	16	1	0 - 59.4	
2-Chlorophenol		39.3	39.6	mg/L	1	80.0	<1.63	49	1	33.87 - 76.65	
1,4-Dichlorobenzene (para)	[25][26]	126	125	mg/L	1	80.0	<1.93	158	1	5.66 - 106.63	
n-Nitrosodi-n-propylamine		78.8	78.3	mg/L	1	80.0	<2.26	98	1	2.12 - 116.53	
1,2,4-Trichlorobenzene		80.0	79.5	mg/L	1	80.0	<1.52	100	1	8.26 - 101.73	
4-Chloro-3-methylphenol		44.0	43.8	mg/L	1	80.0	<1.60	55	0	49.08 - 66.06	
Acenaphthene		32.6	32.5	mg/L	1	80.0	<1.58	41	0	10.76 - 107.89	
4-Nitrophenol		3.83	4.04	mg/L	1	80.0	<3.83	5	5	0 - 70.4	
2,4-Dinitrotoluene		53.7	58.2	mg/L	1	80.0	<2.09	67	8	0 - 140	
Pentachlorophenol		67.0	71.0	mg/L	1	80.0	<3.04	84	6	0 - 121	
Pyrene		33.9	34.1	mg/L	1	80.0	<1.81	42	0	13.81 - 106.27	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol	23.0	23.0	mg/L	1	80	29	29	7.07 - 72.13
Phenol-d5	14.1	14.2	mg/L	1	80	18	18	0 - 67.01
Nitrobenzene-d5	51.6	51.5	mg/L	1	80	64	64	32.4 - 110.8
2-Fluorobiphenyl	54.1	54.4	mg/L	1	80	68	68	46.84 - 91.48

continued . . .

[21]The average of the spike compounds shows that the process is in control.
[22]The average of the spike compounds shows that the process is in control.
[23]The average of the spike compounds shows that the process is in control.
[24]The average of the spike compounds shows that the process is in control.
[25]The average of the spike compounds shows that the process is in control.
[26]The average of the spike compounds shows that the process is in control.

matrix spikes continued . . .

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2,4,6-Tribromophenol	62.7	62.2	mg/L	1	80	78	78	29.39 - 110.7
Terphenyl-d14	57.5	57.7	mg/L	1	80	72	72	34.1 - 95.34

Standard (CCV-1) QC Batch: 10988

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	59.1	98	80 - 120	2004-07-11
1,4-Dichlorobenzene (para)		mg/L	60.0	60.6	101	80 - 120	2004-07-11
2-Nitrophenol		mg/L	60.0	62.8	105	80 - 120	2004-07-11
2,4-Dichlorophenol		mg/L	60.0	64.0	107	80 - 120	2004-07-11
Hexachlorobutadiene		mg/L	60.0	60.9	101	80 - 120	2004-07-11
4-Chloro-3-methylphenol		mg/L	60.0	64.5	108	80 - 120	2004-07-11
2,4,6-Trichlorophenol		mg/L	60.0	61.4	102	80 - 120	2004-07-11
Acenaphthene		mg/L	60.0	60.4	101	80 - 120	2004-07-11
Diphenylamine		mg/L	60.0	56.9	95	80 - 120	2004-07-11
Pentachlorophenol		mg/L	60.0	64.7	108	80 - 120	2004-07-11
Fluoranthene		mg/L	60.0	64.0	107	80 - 120	2004-07-11
Di-n-octylphthalate		mg/L	60.0	57.6	96	80 - 120	2004-07-11
Benzo(a)pyrene		mg/L	60.0	59.9	100	80 - 120	2004-07-11

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		62.2	mg/L	1	60.0	104	80 - 120
Phenol-d5		60.2	mg/L	1	60.0	100	80 - 120
Nitrobenzene-d5		60.4	mg/L	1	60.0	101	80 - 120
2-Fluorobiphenyl		59.4	mg/L	1	60.0	99	80 - 120
2,4,6-Tribromophenol		65.9	mg/L	1	60.0	110	80 - 120
Terphenyl-d14		61.8	mg/L	1	60.0	103	80 - 120

Standard (CCV-1) QC Batch: 10990

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	59.1	98	80 - 120	2004-07-11
1,4-Dichlorobenzene (para)		mg/L	60.0	60.6	101	80 - 120	2004-07-11
2-Nitrophenol		mg/L	60.0	62.8	105	80 - 120	2004-07-11
2,4-Dichlorophenol		mg/L	60.0	64.0	107	80 - 120	2004-07-11
Hexachlorobutadiene		mg/L	60.0	60.9	102	80 - 120	2004-07-11
4-Chloro-3-methylphenol		mg/L	60.0	64.5	108	80 - 120	2004-07-11
2,4,6-Trichlorophenol		mg/L	60.0	61.4	102	80 - 120	2004-07-11
Acenaphthene		mg/L	60.0	60.4	101	80 - 120	2004-07-11
Diphenylamine		mg/L	60.0	56.9	95	80 - 120	2004-07-11
Pentachlorophenol		mg/L	60.0	64.7	108	80 - 120	2004-07-11
Fluoranthene		mg/L	60.0	64.0	107	80 - 120	2004-07-11
Di-n-octylphthalate		mg/L	60.0	57.6	96	80 - 120	2004-07-11
Benzo(a)pyrene		mg/L	60.0	59.9	100	80 - 120	2004-07-11

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		62.2	mg/L	1	60.0	104	80 - 120
Phenol-d5		60.2	mg/L	1	60.0	100	80 - 120
Nitrobenzene-d5		60.4	mg/L	1	60.0	101	80 - 120
2-Fluorobiphenyl		59.4	mg/L	1	60.0	99	80 - 120
2,4,6-Tribromophenol		65.9	mg/L	1	60.0	110	80 - 120
Terphenyl-d14		61.8	mg/L	1	60.0	103	80 - 120

Standard (CCV-1) QC Batch: 11246

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	58.4	97	80 - 120	2004-07-21
1,4-Dichlorobenzene (para)		mg/L	60.0	60.6	101	80 - 120	2004-07-21
2-Nitrophenol		mg/L	60.0	61.5	102	80 - 120	2004-07-21
2,4-Dichlorophenol		mg/L	60.0	62.7	104	80 - 120	2004-07-21
Hexachlorobutadiene		mg/L	60.0	61.4	102	80 - 120	2004-07-21
4-Chloro-3-methylphenol		mg/L	60.0	63.9	106	80 - 120	2004-07-21
2,4,6-Trichlorophenol		mg/L	60.0	64.8	108	80 - 120	2004-07-21
Acenaphthene		mg/L	60.0	59.4	99	80 - 120	2004-07-21
Diphenylamine		mg/L	60.0	68.3	114	80 - 120	2004-07-21
Pentachlorophenol		mg/L	60.0	67.3	112	80 - 120	2004-07-21
Fluoranthene		mg/L	60.0	64.6	108	80 - 120	2004-07-21
Di-n-octylphthalate		mg/L	60.0	61.6	103	80 - 120	2004-07-21
Benzo(a)pyrene		mg/L	60.0	61.2	102	80 - 120	2004-07-21

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		62.6	mg/L	1	60.0	104	80 - 120
Phenol-d5		59.9	mg/L	1	60.0	100	80 - 120
Nitrobenzene-d5		61.1	mg/L	1	60.0	102	80 - 120
2-Fluorobiphenyl		60.6	mg/L	1	60.0	101	80 - 120
2,4,6-Tribromophenol		60.0	mg/L	1	60.0	100	80 - 120
Terphenyl-d14		56.5	mg/L	1	60.0	94	80 - 120

Standard (CCV-1) QC Batch: 11291

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	58.8	98	80 - 120	2004-07-25
1,4-Dichlorobenzene (para)		mg/L	60.0	60.6	101	80 - 120	2004-07-25
2-Nitrophenol		mg/L	60.0	61.2	102	80 - 120	2004-07-25
2,4-Dichlorophenol		mg/L	60.0	64.6	108	80 - 120	2004-07-25
Hexachlorobutadiene		mg/L	60.0	62.3	104	80 - 120	2004-07-25
4-Chloro-3-methylphenol		mg/L	60.0	65.1	108	80 - 120	2004-07-25
2,4,6-Trichlorophenol		mg/L	60.0	62.8	105	80 - 120	2004-07-25
Acenaphthene		mg/L	60.0	60.8	101	80 - 120	2004-07-25
Diphenylamine		mg/L	60.0	60.8	101	80 - 120	2004-07-25
Pentachlorophenol		mg/L	60.0	68.8	115	80 - 120	2004-07-25
Fluoranthene		mg/L	60.0	58.9	98	80 - 120	2004-07-25

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Di-n-octylphthalate		mg/L	60.0	59.7	100	80 - 120	2004-07-25
Benzo(a)pyrene		mg/L	60.0	60.5	101	80 - 120	2004-07-25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		61.2	mg/L	1	60.0	102	80 - 120
Phenol-d5		59.3	mg/L	1	60.0	99	80 - 120
Nitrobenzene-d5		60.4	mg/L	1	60.0	101	80 - 120
2-Fluorobiphenyl		60.0	mg/L	1	60.0	100	80 - 120
2,4,6-Tribromophenol		70.0	mg/L	1	60.0	117	80 - 120
Terphenyl-d14		59.3	mg/L	1	60.0	99	80 - 120

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11000	Date Analyzed:	2004-07-02	Analyzed By:	JG
Prep Batch:	9723	Date Prepared:	2004-07-02	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		10300	mg/L	1	5.00

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11000	Date Analyzed:	2004-07-02	Analyzed By:	JG
Prep Batch:	9723	Date Prepared:	2004-07-02	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		11200	mg/L	1	5.00

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11061	Date Analyzed:	2004-07-09	Analyzed By:	JG
Prep Batch:	9779	Date Prepared:	2004-07-09	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		12300	mg/L	1	5.00

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11280	Date Analyzed:	2004-07-22	Analyzed By:	JG
Prep Batch:	9977	Date Prepared:	2004-07-22	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		11900	mg/L	1	5.00

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11280	Date Analyzed:	2004-07-22	Analyzed By:	JG
Prep Batch:	9977	Date Prepared:	2004-07-22	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		29900	mg/L	1	5.00

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	11280	Date Analyzed:	2004-07-22	Analyzed By:	JG
Prep Batch:	9977	Date Prepared:	2004-07-22	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		30000	mg/L	1	5.00

Method Blank (1) QC Batch: 11000

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Method Blank (1) QC Batch: 11061

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Method Blank (1) QC Batch: 11280

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Duplicate (1) QC Batch: 11000

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	2360	2320	mg/L	1	2	8.4

Duplicate (1) QC Batch: 11061

continued . . .

duplicate continued . . .

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	8710	8830	mg/L	1	1	8.4

Duplicate (1) QC Batch: 11280

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	585	570	mg/L	1	2	8.4

Standard (ICV-1) QC Batch: 11000

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1000	100	92 - 107	2004-07-02

Standard (CCV-1) QC Batch: 11000

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1030	103	92 - 107	2004-07-02

Standard (ICV-1) QC Batch: 11061

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	998	100	92 - 107	2004-07-09

Standard (CCV-1) QC Batch: 11061

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	994	99	92 - 107	2004-07-09

Standard (ICV-1) QC Batch: 11280

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1020	102	92 - 107	2004-07-22

Standard (CCV-1) QC Batch: 11280

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	995	100	92 - 107	2004-07-22

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11030	Date Analyzed:	2004-07-13	Analyzed By:	MW
Prep Batch:	9748	Date Prepared:	2004-07-12	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.00	mg/L	1	4.00

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11030	Date Analyzed:	2004-07-13	Analyzed By:	MW
Prep Batch:	9748	Date Prepared:	2004-07-12	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.00	mg/L	1	4.00

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11030	Date Analyzed:	2004-07-13	Analyzed By:	MW
Prep Batch:	9748	Date Prepared:	2004-07-12	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		< 4.00	mg/L	1	4.00

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11308	Date Analyzed:	2004-07-23	Analyzed By:	WB
Prep Batch:	9999	Date Prepared:	2004-07-23	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11543	Date Analyzed:	2004-07-29	Analyzed By:	WB
Prep Batch:	10204	Date Prepared:	2004-07-29	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	11543	Date Analyzed:	2004-07-29	Analyzed By:	WB
Prep Batch:	10204	Date Prepared:	2004-07-29	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	1	4.00

Method Blank (1) QC Batch: 11030

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		< 4.00	mg/L	4

Method Blank (1) QC Batch: 11308

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	4

Method Blank (1) QC Batch: 11543

Parameter	Flag	Result	Units	RL
Total Kjeldahl Nitrogen - N		<4.00	mg/L	4

Laboratory Control Spike (LCS-1) QC Batch: 11030

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	[1,2]	31.4	45.9	mg/L	1	50.0	<4.00	63	38	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11308

[1]Problem with digestion. Blank spike duplicate was within the correct range.
[2]RPD high due to LCS being too low (lid popped off during digestion).

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	46.5	47.0	mg/L	1	50.0	<4.00	93	1	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11543

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N [3]	48.7	56.3	mg/L	1	50.0	<4.00	97	14	68.3 - 106	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11030

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N [4]	22.1	15.1	mg/L	1	50.0	<4.00	44	38	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11308

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	44.5	47.6	mg/L	1	50.0	7	75	7	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11543

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	48.7	47.0	mg/L	1	50.0	<4.00	97	4	32.6 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 11030

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.37	87	85 - 115	2004-07-13

Standard (CCV-1) QC Batch: 11030

[3] lcsd high due to operator error
[4] Matrix difficulties. Sample interference.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.37	87	85 - 115	2004-07-13

Standard (ICV-1) QC Batch: 11308

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.93	99	85 - 115	2004-07-23

Standard (CCV-1) QC Batch: 11308

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.82	96	85 - 115	2004-07-23

Standard (ICV-1) QC Batch: 11543

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	5.04	101	85 - 115	2004-07-29

Standard (CCV-1) QC Batch: 11543

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.54	91	85 - 115	2004-07-29

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	10908	Date Analyzed:	2004-07-06	Analyzed By:	RC
Prep Batch:	9644	Date Prepared:	2004-07-06	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	10908	Date Analyzed:	2004-07-06	Analyzed By:	RC
Prep Batch:	9644	Date Prepared:	2004-07-06	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11233	Date Analyzed:	2004-07-20	Analyzed By:	RC
Prep Batch:	9932	Date Prepared:	2004-07-20	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11453	Date Analyzed:	2004-07-27	Analyzed By:	RC
Prep Batch:	10071	Date Prepared:	2004-07-27	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11453	Date Analyzed:	2004-07-27	Analyzed By:	RC
Prep Batch:	10071	Date Prepared:	2004-07-27	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		3.40	mg/L	1	1.00

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	11453	Date Analyzed:	2004-07-27	Analyzed By:	RC
Prep Batch:	10071	Date Prepared:	2004-07-27	Prepared By:	RC

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		4.01	mg/L	1	1.00

Method Blank (1) QC Batch: 10908

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Method Blank (1) QC Batch: 11233

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Method Blank (1) QC Batch: 11453

Parameter	Flag	Result	Units	RL
Total Organic Carbon		<1.00	mg/L	1

Laboratory Control Spike (LCS-1) QC Batch: 10908

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	5.50	5.55	mg/L	1	5.00	<0.382	110	1	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11233

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	4.37	4.37	mg/L	1	5.00	<0.382	87	0	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11453

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	5.15	5.76	mg/L	1	5.00	<0.382	103	11	77 - 122	13

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10908

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	8.22	7.23	mg/L	1	5.00	<0.382	164	13	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11233

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	26.3	25.9	mg/L	1	5.00	20.5	116	2	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11453

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Organic Carbon	8.10	10.2	mg/L	1	5.00	2.45	113	23	24 - 207	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 10908

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.98	100	85 - 115	2004-07-06

Standard (CCV-1) QC Batch: 10908

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.63	93	85 - 115	2004-07-06

Standard (ICV-1) QC Batch: 11233

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.33	87	85 - 115	2004-07-20

Standard (CCV-1) QC Batch: 11233

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.61	92	85 - 115	2004-07-20

Standard (ICV-1) QC Batch: 11453

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.63	113	85 - 115	2004-07-27

Standard (CCV-1) QC Batch: 11453

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	5.64	113	85 - 115	2004-07-27

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20

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 20 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	10958	Date Analyzed:	2004-07-09	Analyzed By:	RR
Prep Batch:	9564	Date Prepared:	2004-07-02	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		1.13	mg/L	1	0.00500
Total Barium		0.0110	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		<0.00500	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Iron		<0.0500	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.223	mg/L	1	0.0500
Total Nickel		<0.00500	mg/L	1	0.00500
Total Phosphorous		0.0560	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		49.4	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		9.04	mg/L	1	0.0100
Total Vanadium		0.0230	mg/L	1	0.00500
Total Zinc		0.0160	mg/L	1	0.0100

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	10970	Date Analyzed:	2004-07-11	Analyzed By:	RR
Prep Batch:	9621	Date Prepared:	2004-07-06	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		1.79	mg/L	1	0.00500
Total Barium		0.0230	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		<0.00500	mg/L	1	0.00500
Total Copper		0.0100	mg/L	1	0.00500
Total Iron		<0.0500	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250

continued . . .

sample 37911 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Molybdenum		0.172	mg/L	1	0.0500
Total Nickel		<0.00500	mg/L	1	0.00500
Total Phosphorous		0.0720	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0100	mg/L	1	0.0100
Total Silica		30.0	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		8.30	mg/L	1	0.0100
Total Vanadium		0.0210	mg/L	1	0.00500
Total Zinc		<0.0100	mg/L	1	0.0100

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	10968	Date Analyzed:	2004-07-11	Analyzed By:	RR
Prep Batch:	9656	Date Prepared:	2004-07-08	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		1.63	mg/L	1	0.00500
Total Barium		0.0160	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		<0.00500	mg/L	1	0.00500
Total Copper		0.0120	mg/L	1	0.00500
Total Iron		<0.0500	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.0710	mg/L	1	0.0500
Total Nickel		<0.00500	mg/L	1	0.00500
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.0870	mg/L	1	0.0100
Total Silica		45.9	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		10.7	mg/L	1	0.0100
Total Vanadium		0.0210	mg/L	1	0.00500
Total Zinc		<0.0100	mg/L	1	0.0100

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	11293	Date Analyzed:	2004-07-26	Analyzed By:	RR
Prep Batch:	9949	Date Prepared:	2004-07-22	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Boron		1.63	mg/L	1	0.00500
Total Barium		<0.100	mg/L	1	0.100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Cobalt		<0.0200	mg/L	1	0.0200
Total Chromium		<0.0100	mg/L	1	0.0100
Total Copper		0.117	mg/L	1	0.0125
Total Iron		<0.0500	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		0.147	mg/L	1	0.0500
Total Nickel		<0.0250	mg/L	1	0.0250
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500
Total Silica		26.0	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		9.25	mg/L	10	0.00500
Total Vanadium		<0.0250	mg/L	1	0.0250
Total Zinc		<0.0250	mg/L	1	0.0250

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	11385	Date Analyzed:	2004-07-28	Analyzed By:	RR
Prep Batch:	10061	Date Prepared:	2004-07-27	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		7.45	mg/L	1	0.00500
Total Barium		0.0110	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		1.15	mg/L	1	0.00500
Total Copper		0.0410	mg/L	1	0.00500
Total Iron		0.0840	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		1.08	mg/L	1	0.0500
Total Nickel		<0.00500	mg/L	1	0.00500
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.476	mg/L	1	0.0100
Total Silica		17.5	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		8.80	mg/L	1	0.0100

continued . . .

sample 39334 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Vanadium		0.0310	mg/L	1	0.00500
Total Zinc		<0.0100	mg/L	1	0.0100

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	11385	Date Analyzed:	2004-07-28	Analyzed By:	RR
Prep Batch:	10061	Date Prepared:	2004-07-27	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00300	mg/L	1	0.00300
Total Aluminum		<0.100	mg/L	1	0.100
Total Arsenic		<0.00500	mg/L	1	0.00500
Total Boron		7.42	mg/L	1	0.00500
Total Barium		0.0110	mg/L	1	0.0100
Total Beryllium		<0.00250	mg/L	1	0.00250
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Cobalt		<0.00500	mg/L	1	0.00500
Total Chromium		1.12	mg/L	1	0.00500
Total Copper		0.0240	mg/L	1	0.00500
Total Iron		0.445	mg/L	1	0.0500
Total Manganese		<0.0250	mg/L	1	0.0250
Total Molybdenum		1.06	mg/L	1	0.0500
Total Nickel		<0.00500	mg/L	1	0.00500
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		0.501	mg/L	1	0.0100
Total Silica		17.8	mg/L	1	0.0500
Total Tin		<0.0250	mg/L	1	0.0250
Total Strontium		8.91	mg/L	1	0.0100
Total Vanadium		0.0320	mg/L	1	0.00500
Total Zinc		<0.0100	mg/L	1	0.0100

Method Blank (1) QC Batch: 10958

Parameter	Flag	Result	Units	RL
Total Silver		<0.00300	mg/L	0.003
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.00500	mg/L	0.005
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.0100	mg/L	0.01
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00100	mg/L	0.001
Total Cobalt		<0.00500	mg/L	0.005
Total Chromium		<0.00500	mg/L	0.005

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Total Copper		<0.00500	mg/L	0.005
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.00500	mg/L	0.005
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0100	mg/L	0.01
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.0100	mg/L	0.01
Total Vanadium		<0.00500	mg/L	0.005
Total Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 10968

Parameter	Flag	Result	Units	RL
Total Silver		<0.00300	mg/L	0.003
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.00500	mg/L	0.005
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.0100	mg/L	0.01
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00100	mg/L	0.001
Total Cobalt		<0.00500	mg/L	0.005
Total Chromium		<0.00500	mg/L	0.005
Total Copper		<0.00500	mg/L	0.005
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.00500	mg/L	0.005
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0100	mg/L	0.01
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.0100	mg/L	0.01
Total Vanadium		<0.00500	mg/L	0.005
Total Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 10970

Parameter	Flag	Result	Units	RL
Total Silver		<0.00300	mg/L	0.003
Total Aluminum		<0.100	mg/L	0.1

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Total Arsenic		<0.00500	mg/L	0.005
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.0100	mg/L	0.01
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00100	mg/L	0.001
Total Cobalt		<0.00500	mg/L	0.005
Total Chromium		<0.00500	mg/L	0.005
Total Copper		<0.00500	mg/L	0.005
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.00500	mg/L	0.005
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0100	mg/L	0.01
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.0100	mg/L	0.01
Total Vanadium		<0.00500	mg/L	0.005
Total Zinc		<0.0100	mg/L	0.01

Method Blank (1) QC Batch: 11293

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.100	mg/L	0.1
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00500	mg/L	0.005
Total Cobalt		<0.0200	mg/L	0.02
Total Chromium		<0.0100	mg/L	0.01
Total Copper		<0.0125	mg/L	0.0125
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0250	mg/L	0.025
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0500	mg/L	0.05
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.00500	mg/L	0.005
Total Vanadium		<0.0250	mg/L	0.025
Total Zinc		<0.0250	mg/L	0.025

Method Blank (1) QC Batch: 11385

Parameter	Flag	Result	Units	RL
Total Silver		<0.00300	mg/L	0.003
Total Aluminum		<0.100	mg/L	0.1
Total Arsenic		<0.00500	mg/L	0.005
Total Boron		<0.00500	mg/L	0.005
Total Barium		<0.0100	mg/L	0.01
Total Beryllium		<0.00250	mg/L	0.0025
Total Cadmium		<0.00100	mg/L	0.001
Total Cobalt		<0.00500	mg/L	0.005
Total Chromium		<0.00500	mg/L	0.005
Total Copper		<0.00500	mg/L	0.005
Total Iron		<0.0500	mg/L	0.05
Total Manganese		<0.0250	mg/L	0.025
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.00500	mg/L	0.005
Total Phosphorous		<0.0500	mg/L	0.05
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0100	mg/L	0.01
Total Silica		<0.0500	mg/L	0.05
Total Tin		<0.0250	mg/L	0.025
Total Strontium		<0.0100	mg/L	0.01
Total Vanadium		<0.00500	mg/L	0.005
Total Zinc		<0.0100	mg/L	0.01

Laboratory Control Spike (LCS-1) QC Batch: 10958

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.125	0.127	mg/L	1	0.125	<0.00274	100	2	85 - 115	20
Total Aluminum	0.972	0.989	mg/L	1	1.00	<0.0133	97	2	85 - 115	20
Total Arsenic	0.503	0.491	mg/L	1	0.500	<0.00489	101	2	85 - 115	20
Total Boron	0.0470	0.0460	mg/L	1	0.0500	<0.00544	94	2	85 - 115	20
Total Barium	0.986	1.02	mg/L	1	1.00	<0.000450	99	3	85 - 114	20
Total Beryllium	0.0250	0.0280	mg/L	1	0.0250	<0.000178	100	11	85 - 115	20
Total Cadmium	0.235	0.241	mg/L	1	0.250	<0.000268	94	2	86 - 115	20
Total Cobalt	0.254	0.255	mg/L	1	0.250	<0.00293	102	0	87 - 113	20
Total Chromium	0.101	0.103	mg/L	1	0.100	<0.00357	101	2	85 - 115	20
Total Copper	0.134	0.133	mg/L	1	0.125	<0.00127	107	1	85 - 113	20
Total Iron	0.489	0.501	mg/L	1	0.500	<0.00220	98	2	85 - 115	20
Total Manganese	0.267	0.266	mg/L	1	0.250	<0.000297	107	0	85 - 110	20
Total Molybdenum	0.502	0.528	mg/L	1	0.500	<0.00690	100	5	85 - 115	20
Total Nickel	0.245	0.256	mg/L	1	0.250	<0.000450	98	4	85 - 112	20
Total Phosphorous	0.527	0.544	mg/L	1	0.500	<0.0229	105	3	85 - 115	20
Total Lead	0.553	0.491	mg/L	1	0.500	<0.00698	111	12	86.1 - 112	20
Total Selenium	0.584	0.582	mg/L	1	0.500	<0.00556	117	0	75 - 125	20
Total Silica	0.551	0.506	mg/L	1	0.500	<0.00490	110	8	85 - 115	20

continued . . .

control spikes continued . . .

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Tin	[12]	0.312	0.281	mg/L	1	0.300	<0.00759	104	10	85 - 115	20
Total Strontium		0.0500	0.0510	mg/L	1	0.0500	<0.000281	100	2	85 - 115	20
Total Vanadium		0.252	0.260	mg/L	1	0.250	<0.00105	101	3	85 - 115	20
Total Zinc		0.236	0.240	mg/L	1	0.250	<0.00300	94	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 10968

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.120	0.122	mg/L	1	0.125	<0.00274	96	2	85 - 115	20
Total Aluminum		0.973	0.956	mg/L	1	1.00	<0.0133	97	2	85 - 115	20
Total Arsenic		0.484	0.499	mg/L	1	0.500	<0.00489	97	3	85 - 115	20
Total Boron		0.0540	0.0520	mg/L	1	0.0500	<0.00544	108	4	85 - 115	20
Total Barium		0.971	0.989	mg/L	1	1.00	<0.000450	97	2	85 - 114	20
Total Beryllium		0.0260	0.0246	mg/L	1	0.0250	<0.000178	104	6	85 - 115	20
Total Cadmium		0.236	0.238	mg/L	1	0.250	<0.000268	94	1	86 - 115	20
Total Cobalt		0.252	0.257	mg/L	1	0.250	<0.00293	101	2	87 - 113	20
Total Chromium		0.0980	0.0980	mg/L	1	0.100	<0.00357	98	0	85 - 115	20
Total Copper		0.134	0.134	mg/L	1	0.125	<0.00127	107	0	85 - 113	20
Total Iron		0.459	0.466	mg/L	1	0.500	<0.00220	92	2	85 - 115	20
Total Manganese		0.246	0.250	mg/L	1	0.250	<0.000297	98	2	85 - 110	20
Total Molybdenum		0.476	0.505	mg/L	1	0.500	<0.00690	95	6	85 - 115	20
Total Nickel		0.259	0.267	mg/L	1	0.250	<0.000450	104	3	85 - 112	20
Total Phosphorous		0.505	0.514	mg/L	1	0.500	<0.0229	101	2	85 - 115	20
Total Lead		0.484	0.482	mg/L	1	0.500	<0.00698	97	0	86.1 - 112	20
Total Selenium		0.505	0.484	mg/L	1	0.500	<0.00556	101	4	75 - 125	20
Total Silica		0.501	0.500	mg/L	1	0.500	<0.00490	100	0	85 - 115	20
Total Tin	[34]	0.257	0.262	mg/L	1	0.300	<0.00759	86	2	85 - 115	20
Total Strontium		0.0450	0.0460	mg/L	1	0.0500	<0.000281	90	2	85 - 115	20
Total Vanadium		0.253	0.258	mg/L	1	0.250	<0.00105	101	2	85 - 115	20
Total Zinc		0.261	0.259	mg/L	1	0.250	<0.00300	104	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 10970

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.115	0.116	mg/L	1	0.125	<0.00274	92	1	85 - 115	20
Total Aluminum		0.902	0.890	mg/L	1	1.00	<0.0133	90	1	85 - 115	20
Total Arsenic		0.459	0.482	mg/L	1	0.500	<0.00489	92	5	85 - 115	20
Total Boron		0.0480	0.0460	mg/L	1	0.0500	<0.00544	96	4	85 - 115	20
Total Barium		0.901	0.898	mg/L	1	1.00	<0.000450	90	0	85 - 114	20
Total Beryllium		0.0240	0.0240	mg/L	1	0.0250	<0.000178	96	0	85 - 115	20

continued . . .

[1]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[2]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[3]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[4]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.

control spikes continued . . .

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cadmium		0.221	0.223	mg/L	1	0.250	<0.000268	88	1	86 - 115	20
Total Cobalt		0.238	0.234	mg/L	1	0.250	<0.00293	95	2	87 - 113	20
Total Chromium		0.0910	0.0890	mg/L	1	0.100	<0.00357	91	2	85 - 115	20
Total Copper		0.121	0.119	mg/L	1	0.125	<0.00127	97	2	85 - 113	20
Total Iron		0.434	0.423	mg/L	1	0.500	<0.00220	87	2	85 - 115	20
Total Manganese		0.230	0.227	mg/L	1	0.250	<0.000297	92	1	85 - 110	20
Total Molybdenum		0.451	0.443	mg/L	1	0.500	<0.00690	90	2	85 - 115	20
Total Nickel		0.236	0.237	mg/L	1	0.250	<0.000450	94	0	85 - 112	20
Total Phosphorous		0.522	0.517	mg/L	1	0.500	<0.0229	104	1	85 - 115	20
Total Lead		0.435	0.444	mg/L	1	0.500	<0.00698	87	2	86.1 - 112	20
Total Selenium		0.443	0.476	mg/L	1	0.500	<0.00556	89	7	75 - 125	20
Total Silica		0.491	0.480	mg/L	1	0.500	<0.00490	98	2	85 - 115	20
Total Tin	[5][6]	0.294	0.317	mg/L	1	0.300	<0.00759	98	8	85 - 115	20
Total Strontium		0.0430	0.0440	mg/L	1	0.0500	<0.000281	86	2	85 - 115	20
Total Vanadium		0.240	0.239	mg/L	1	0.250	<0.00105	96	0	85 - 115	20
Total Zinc		0.254	0.247	mg/L	1	0.250	<0.00300	102	3	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 11293

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.127	0.126	mg/L	1	0.125	<0.000199	102	1	85 - 115	20
Total Aluminum		0.986	0.973	mg/L	1	1.00	<0.00984	99	1	85 - 115	20
Total Arsenic		0.501	0.492	mg/L	1	0.500	<0.00860	100	2	85 - 115	20
Total Boron		0.0510	0.0480	mg/L	1	0.0500	<0.00366	102	6	85 - 115	20
Total Barium		1.03	1.02	mg/L	1	1.00	<0.000984	103	1	85 - 115	20
Total Beryllium		0.0250	0.0250	mg/L	1	0.0250	<0.000532	100	0	85 - 115	20
Total Cadmium		0.248	0.246	mg/L	1	0.250	<0.000577	99	1	85 - 115	20
Total Cobalt		0.257	0.258	mg/L	1	0.250	<0.000630	103	0	85 - 115	20
Total Chromium		0.109	0.108	mg/L	1	0.100	<0.000437	109	1	85 - 115	20
Total Copper		0.129	0.128	mg/L	1	0.125	<0.00164	103	1	85 - 115	20
Total Iron		0.487	0.487	mg/L	1	0.500	<0.00281	97	0	85 - 115	20
Total Manganese		0.254	0.251	mg/L	1	0.250	<0.00296	102	1	85 - 115	20
Total Molybdenum		0.516	0.516	mg/L	1	0.500	<0.00118	103	0	85 - 115	20
Total Nickel		0.253	0.251	mg/L	1	0.250	<0.00126	101	1	85 - 115	20
Total Phosphorous		0.520	0.517	mg/L	1	0.500	<0.00459	104	0	85 - 115	20
Total Lead		0.507	0.503	mg/L	1	0.500	<0.00310	101	1	85 - 115	20
Total Selenium		0.463	0.455	mg/L	1	0.500	<0.00370	93	2	85 - 115	20
Total Silica		0.492	0.491	mg/L	1	0.500	<0.00632	98	0	85 - 115	20
Total Tin	[7][8]	0.311	0.309	mg/L	1	0.300	<0.00238	104	1	85 - 115	20
Total Strontium		0.0510	0.0500	mg/L	1	0.0500	<0.000457	102	2	85 - 115	20
Total Vanadium		0.257	0.255	mg/L	1	0.250	<0.000371	103	1	85 - 115	20
Total Zinc		0.252	0.250	mg/L	1	0.250	<0.00151	101	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[5]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[6]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[7]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[8]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.

Laboratory Control Spike (LCS-1) QC Batch: 11385

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.121	0.122	mg/L	1	0.125	<0.00274	97	1	85 - 115	20
Total Aluminum		0.986	0.968	mg/L	1	1.00	<0.0133	99	2	85 - 115	20
Total Arsenic		0.467	0.490	mg/L	1	0.500	<0.00489	93	5	85 - 115	20
Total Boron		0.0440	0.0430	mg/L	1	0.0500	<0.00544	88	2	85 - 115	20
Total Barium		0.988	0.997	mg/L	1	1.00	<0.000450	99	1	85 - 114	20
Total Beryllium		0.0230	0.0250	mg/L	1	0.0250	<0.000178	92	8	85 - 115	20
Total Cadmium		0.234	0.238	mg/L	1	0.250	<0.000268	94	2	86 - 115	20
Total Cobalt		0.244	0.243	mg/L	1	0.250	<0.00293	98	0	87 - 113	20
Total Chromium		0.101	0.101	mg/L	1	0.100	<0.00357	101	0	85 - 115	20
Total Copper		0.126	0.128	mg/L	1	0.125	<0.00127	101	2	85 - 113	20
Total Iron		0.536	0.487	mg/L	1	0.500	<0.00220	107	10	85 - 115	20
Total Manganese		0.247	0.249	mg/L	1	0.250	<0.000297	99	1	85 - 110	20
Total Molybdenum		0.517	0.513	mg/L	1	0.500	<0.00690	103	1	85 - 115	20
Total Nickel		0.252	0.255	mg/L	1	0.250	<0.000450	101	1	85 - 112	20
Total Phosphorous		0.487	0.486	mg/L	1	0.500	<0.0229	97	0	85 - 115	20
Total Lead		0.512	0.497	mg/L	1	0.500	<0.00698	102	3	86.1 - 112	20
Total Selenium		0.470	0.446	mg/L	1	0.500	<0.00556	94	5	75 - 125	20
Total Silica		0.501	0.493	mg/L	1	0.500	<0.00490	100	2	85 - 115	20
Total Tin	[9][10]	0.287	0.309	mg/L	1	0.300	<0.00759	96	7	85 - 115	20
Total Strontium		0.0480	0.0480	mg/L	1	0.0500	<0.000281	96	0	85 - 115	20
Total Vanadium		0.251	0.252	mg/L	1	0.250	<0.00105	100	0	85 - 115	20
Total Zinc		0.252	0.251	mg/L	1	0.250	<0.00300	101	0	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10958

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.130	0.134	mg/L	1	0.125	<0.00274	104	3	75 - 125	20
Total Aluminum	0.867	0.907	mg/L	1	1.00	<0.0133	87	4	75 - 125	20
Total Arsenic	0.493	0.467	mg/L	1	0.500	<0.00489	99	5	75 - 125	20
Total Boron	0.0510	0.0490	mg/L	1	0.0500	<0.00544	102	4	75 - 125	20
Total Barium	1.05	1.05	mg/L	1	1.00	<0.000450	105	0	75 - 125	20
Total Beryllium	0.0240	0.0253	mg/L	1	0.0250	<0.000178	96	5	75 - 125	20
Total Cadmium	0.236	0.235	mg/L	1	0.250	<0.000268	94	0	75 - 125	20
Total Cobalt	0.256	0.250	mg/L	1	0.250	<0.00293	102	2	75 - 125	20
Total Chromium	0.103	0.0980	mg/L	1	0.100	<0.00357	103	5	75 - 125	20
Total Copper	0.136	0.133	mg/L	1	0.125	<0.00127	109	2	75 - 125	20
Total Iron	0.491	0.485	mg/L	1	0.500	<0.00220	98	1	75 - 125	20
Total Manganese	0.254	0.251	mg/L	1	0.250	<0.000297	102	1	75 - 125	20
Total Molybdenum	0.503	0.516	mg/L	1	0.500	<0.00690	101	2	75 - 125	20
Total Nickel	0.241	0.239	mg/L	1	0.250	<0.000450	96	1	75 - 125	20
Total Phosphorous	0.501	0.532	mg/L	1	0.500	<0.0229	100	6	75 - 125	20
Total Lead	0.533	0.505	mg/L	1	0.500	<0.00698	107	5	75 - 125	20
Total Selenium	0.457	0.570	mg/L	1	0.500	<0.00556	91	22	75 - 125	20
Total Silica	0.525	0.512	mg/L	1	0.500	<0.00490	105	2	75 - 125	20

continued . . .

[9]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[10]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Tin	[11][12]	0.273	0.303	mg/L	1	0.300	<0.00759	91	10	75 - 125	20
Total Strontium		0.0480	0.0490	mg/L	1	0.0500	<0.000281	96	2	75 - 125	20
Total Vanadium		0.256	0.255	mg/L	1	0.250	<0.00105	102	0	75 - 125	20
Total Zinc		0.251	0.251	mg/L	1	0.250	0.016	94	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10968

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.131	0.129	mg/L	1	0.125	<0.00274	105	2	75 - 125	20
Total Aluminum		1.08	1.10	mg/L	1	1.00	<0.0133	108	2	75 - 125	20
Total Arsenic		0.563	0.553	mg/L	1	0.500	<0.00489	113	2	75 - 125	20
Total Boron		0.0480	0.0510	mg/L	1	0.0500	<0.00544	96	6	75 - 125	20
Total Barium		1.18	1.09	mg/L	1	1.00	<0.000450	118	8	75 - 125	20
Total Beryllium		0.0260	0.0240	mg/L	1	0.0250	<0.000178	104	8	75 - 125	20
Total Cadmium		0.259	0.256	mg/L	1	0.250	<0.000268	104	1	75 - 125	20
Total Cobalt		0.300	0.288	mg/L	1	0.250	<0.00293	120	4	75 - 125	20
Total Chromium		0.105	0.106	mg/L	1	0.100	<0.00357	105	1	75 - 125	20
Total Copper		0.119	0.121	mg/L	1	0.125	<0.00127	95	2	75 - 125	20
Total Iron		0.528	0.601	mg/L	1	0.500	<0.00220	106	13	75 - 125	20
Total Manganese		0.272	0.269	mg/L	1	0.250	<0.000297	109	1	75 - 125	20
Total Molybdenum		0.525	0.538	mg/L	1	0.500	<0.00690	105	2	75 - 125	20
Total Nickel		0.300	0.288	mg/L	1	0.250	<0.000450	120	4	75 - 125	20
Total Phosphorous		0.532	0.522	mg/L	1	0.500	<0.0229	106	2	75 - 125	20
Total Lead		0.516	0.526	mg/L	1	0.500	<0.00698	103	2	75 - 125	20
Total Selenium		0.465	0.477	mg/L	1	0.500	<0.00556	93	2	75 - 125	20
Total Silica		0.485	0.488	mg/L	1	0.500	<0.00490	97	1	75 - 125	20
Total Tin	[13][14]	0.307	0.306	mg/L	1	0.300	<0.00759	102	0	75 - 125	20
Total Strontium		0.0470	0.0480	mg/L	1	0.0500	<0.000281	94	2	75 - 125	20
Total Vanadium		0.270	0.280	mg/L	1	0.250	<0.00105	108	4	75 - 125	20
Total Zinc		0.301	0.295	mg/L	1	0.250	<0.00300	120	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 10970

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.136	0.132	mg/L	1	0.125	<0.00274	109	3	75 - 125	20
Total Aluminum		1.05	1.07	mg/L	1	1.00	<0.0133	105	2	75 - 125	20
Total Arsenic		0.525	0.519	mg/L	1	0.500	<0.00489	105	1	75 - 125	20
Total Boron		0.0480	0.0500	mg/L	1	0.0500	<0.00544	96	4	75 - 125	20
Total Barium		1.15	1.10	mg/L	1	1.00	<0.000450	115	4	75 - 125	20
Total Beryllium		0.0230	0.0260	mg/L	1	0.0250	<0.000178	92	12	75 - 125	20

continued . . .

[11]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[12]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[13]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[14]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.

matrix spikes continued . . .

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Cadmium		0.233	0.235	mg/L	1	0.250	<0.000268	93	1	75 - 125	20
Total Cobalt		0.261	0.263	mg/L	1	0.250	<0.00293	104	1	75 - 125	20
Total Chromium		0.0940	0.0960	mg/L	1	0.100	<0.00357	94	2	75 - 125	20
Total Copper		0.119	0.121	mg/L	1	0.125	<0.00127	95	2	75 - 125	20
Total Iron		0.507	0.505	mg/L	1	0.500	<0.00220	101	0	75 - 125	20
Total Manganese		0.253	0.258	mg/L	1	0.250	<0.000297	101	2	75 - 125	20
Total Molybdenum		0.470	0.492	mg/L	1	0.500	<0.00690	94	4	75 - 125	20
Total Nickel		0.261	0.262	mg/L	1	0.250	<0.000450	104	0	75 - 125	20
Total Phosphorous		0.508	0.517	mg/L	1	0.500	<0.0229	102	2	75 - 125	20
Total Lead		0.503	0.506	mg/L	1	0.500	<0.00698	101	0	75 - 125	20
Total Selenium		0.436	0.446	mg/L	1	0.500	<0.00556	87	2	75 - 125	20
Total Silica		0.436	0.456	mg/L	1	0.500	<0.00490	87	4	75 - 125	20
Total Tin	[15][16]	0.303	0.305	mg/L	1	0.300	<0.00759	101	1	75 - 125	20
Total Strontium		0.0400	0.0380	mg/L	1	0.0500	<0.000281	80	5	75 - 125	20
Total Vanadium		0.252	0.254	mg/L	1	0.250	<0.00105	101	1	75 - 125	20
Total Zinc		0.272	0.268	mg/L	1	0.250	<0.00300	109	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 11293

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.120	0.127	mg/L	1	0.125	<0.000199	96	6	75 - 125	20
Total Aluminum		1.02	1.07	mg/L	1	1.00	<0.00984	102	5	75 - 125	20
Total Arsenic		0.465	0.493	mg/L	1	0.500	<0.00860	93	6	75 - 125	20
Total Boron		0.0510	0.0520	mg/L	1	0.0500	<0.00366	102	2	75 - 125	20
Total Barium		0.985	1.04	mg/L	1	1.00	<0.000984	98	5	75 - 125	20
Total Beryllium		0.0220	0.0230	mg/L	1	0.0250	<0.000532	88	4	75 - 125	20
Total Cadmium		0.203	0.216	mg/L	1	0.250	<0.000577	81	6	75 - 125	20
Total Cobalt		0.216	0.226	mg/L	1	0.250	<0.000630	86	4	75 - 125	20
Total Chromium		0.0910	0.0950	mg/L	1	0.100	<0.000437	91	4	75 - 125	20
Total Copper		0.127	0.126	mg/L	1	0.125	<0.00164	102	1	75 - 125	20
Total Iron		0.433	0.455	mg/L	1	0.500	<0.00281	87	5	75 - 125	20
Total Manganese		0.216	0.232	mg/L	1	0.250	<0.00296	86	7	75 - 125	20
Total Molybdenum		0.456	0.479	mg/L	1	0.500	<0.00118	91	5	75 - 125	20
Total Nickel		0.223	0.233	mg/L	1	0.250	<0.00126	89	4	75 - 125	20
Total Phosphorous		0.491	0.509	mg/L	1	0.500	<0.00459	98	4	75 - 125	20
Total Lead		0.414	0.432	mg/L	1	0.500	<0.00310	83	4	75 - 125	20
Total Selenium		0.446	0.467	mg/L	1	0.500	<0.00370	89	5	75 - 125	20
Total Silica		0.532	0.521	mg/L	1	0.500	<0.00632	106	2	75 - 125	20
Total Tin	[17][18]	0.245	0.254	mg/L	1	0.300	<0.00238	82	4	75 - 125	20
Total Strontium		0.0520	0.0530	mg/L	1	0.0500	<0.000457	104	2	75 - 125	20
Total Vanadium		0.234	0.247	mg/L	1	0.250	<0.000371	94	5	75 - 125	20
Total Zinc		0.216	0.223	mg/L	1	0.250	<0.00151	86	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[15]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[16]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[17]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.
[18]Changed spike amount from 30 to 0.3 due to concentration in spiking solution.

Matrix Spike (MS-1) QC Batch: 11385

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver		0.144	0.143	mg/L	1	0.125	<0.00274	115	1	75 - 125	20
Total Aluminum		1.06	1.06	mg/L	1	1.00	<0.0133	106	0	75 - 125	20
Total Arsenic		0.500	0.480	mg/L	1	0.500	<0.00489	100	4	75 - 125	20
Total Boron		0.0520	0.0520	mg/L	1	0.0500	<0.00544	104	0	75 - 125	20
Total Barium		1.08	1.07	mg/L	1	1.00	<0.000450	108	1	75 - 125	20
Total Beryllium		0.0256	0.0240	mg/L	1	0.0250	<0.000178	102	6	75 - 125	20
Total Cadmium		0.246	0.245	mg/L	1	0.250	<0.000268	98	0	75 - 125	20
Total Cobalt		0.262	0.259	mg/L	1	0.250	<0.00293	105	1	75 - 125	20
Total Chromium		0.103	0.103	mg/L	1	0.100	<0.00357	103	0	75 - 125	20
Total Copper		0.139	0.139	mg/L	1	0.125	<0.00127	111	0	75 - 125	20
Total Iron		0.561	0.491	mg/L	1	0.500	<0.00220	112	13	75 - 125	20
Total Manganese		0.238	0.232	mg/L	1	0.250	<0.000297	95	2	75 - 125	20
Total Molybdenum		0.528	0.546	mg/L	1	0.500	<0.00690	106	3	75 - 125	20
Total Nickel		0.260	0.260	mg/L	1	0.250	<0.000450	104	0	75 - 125	20
Total Phosphorous		0.495	0.502	mg/L	1	0.500	<0.0229	99	1	75 - 125	20
Total Lead		0.567	0.516	mg/L	1	0.500	<0.00698	113	9	75 - 125	20
Total Selenium		0.483	0.511	mg/L	1	0.500	<0.00556	97	6	75 - 125	20
Total Silica		0.505	0.512	mg/L	1	0.500	<0.00490	101	1	75 - 125	20
Total Tin	[19][20]	0.290	0.306	mg/L	1	0.300	<0.00759	97	5	75 - 125	20
Total Strontium		0.0520	0.0550	mg/L	1	0.0500	<0.000281	104	6	75 - 125	20
Total Vanadium		0.256	0.255	mg/L	1	0.250	<0.00105	102	0	75 - 125	20
Total Zinc		0.264	0.265	mg/L	1	0.250	<0.00300	106	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 10958

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.124	99	90 - 110	2004-07-09
Total Aluminum		mg/L	1.00	1.05	105	90 - 110	2004-07-09
Total Arsenic		mg/L	1.00	1.03	103	90 - 110	2004-07-09
Total Boron		mg/L	1.00	1.02	102	90 - 110	2004-07-09
Total Barium		mg/L	1.00	0.990	99	90 - 110	2004-07-09
Total Beryllium		mg/L	1.00	0.995	100	90 - 110	2004-07-09
Total Cadmium		mg/L	1.00	0.996	100	90 - 110	2004-07-09
Total Cobalt		mg/L	1.00	1.00	100	90 - 110	2004-07-09
Total Chromium		mg/L	1.00	0.996	100	90 - 110	2004-07-09
Total Copper		mg/L	1.00	0.997	100	90 - 110	2004-07-09
Total Iron		mg/L	1.00	1.00	100	90 - 110	2004-07-09
Total Manganese		mg/L	1.00	0.986	99	90 - 110	2004-07-09
Total Molybdenum		mg/L	1.00	1.03	103	90 - 110	2004-07-09
Total Nickel		mg/L	1.00	0.997	100	90 - 110	2004-07-09
Total Phosphorous		mg/L	5.00	5.12	102	90 - 110	2004-07-09
Total Lead		mg/L	1.00	1.02	102	90 - 110	2004-07-09
Total Selenium		mg/L	1.00	1.07	107	90 - 110	2004-07-09
Total Silica		mg/L	5.00	5.35	107	90 - 110	2004-07-09

continued . . .

[19]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.
[20]Changed spike amount from 30 to 0.3 due to concentration of spiking solution.

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Tin		mg/L	1.00	1.08	108	90 - 110	2004-07-09
Total Strontium		mg/L	1.00	0.970	97	90 - 110	2004-07-09
Total Vanadium		mg/L	1.00	1.03	103	90 - 110	2004-07-09
Total Zinc		mg/L	1.00	0.974	97	90 - 110	2004-07-09

Standard (CCV-1) QC Batch: 10958

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.118	94	90 - 110	2004-07-09
Total Aluminum		mg/L	1.00	1.02	102	90 - 110	2004-07-09
Total Arsenic		mg/L	1.00	0.972	97	90 - 110	2004-07-09
Total Boron		mg/L	1.00	0.992	99	90 - 110	2004-07-09
Total Barium		mg/L	1.00	0.975	98	90 - 110	2004-07-09
Total Beryllium		mg/L	1.00	0.995	100	90 - 110	2004-07-09
Total Cadmium		mg/L	1.00	0.985	98	90 - 110	2004-07-09
Total Cobalt		mg/L	1.00	0.989	99	90 - 110	2004-07-09
Total Chromium		mg/L	1.00	0.987	99	90 - 110	2004-07-09
Total Copper		mg/L	1.00	1.01	101	90 - 110	2004-07-09
Total Iron		mg/L	1.00	0.988	99	90 - 110	2004-07-09
Total Manganese		mg/L	1.00	0.980	98	90 - 110	2004-07-09
Total Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-07-09
Total Nickel		mg/L	1.00	0.992	99	90 - 110	2004-07-09
Total Phosphorous		mg/L	5.00	5.07	101	90 - 110	2004-07-09
Total Lead		mg/L	1.00	0.969	97	90 - 110	2004-07-09
Total Selenium		mg/L	1.00	0.971	97	90 - 110	2004-07-09
Total Silica		mg/L	5.00	5.29	106	90 - 110	2004-07-09
Total Tin		mg/L	1.00	0.996	100	90 - 110	2004-07-09
Total Strontium		mg/L	1.00	0.954	95	90 - 110	2004-07-09
Total Vanadium		mg/L	1.00	1.01	101	90 - 110	2004-07-09
Total Zinc		mg/L	1.00	0.976	98	90 - 110	2004-07-09

Standard (ICV-1) QC Batch: 10968

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.122	98	90 - 110	2004-07-11
Total Aluminum		mg/L	1.00	0.945	94	90 - 110	2004-07-11
Total Arsenic		mg/L	1.00	1.00	100	90 - 110	2004-07-11
Total Boron		mg/L	1.00	1.03	103	90 - 110	2004-07-11
Total Barium		mg/L	1.00	0.952	95	90 - 110	2004-07-11
Total Beryllium		mg/L	1.00	1.04	104	90 - 110	2004-07-11
Total Cadmium		mg/L	1.00	0.985	98	90 - 110	2004-07-11
Total Cobalt		mg/L	1.00	0.965	96	90 - 110	2004-07-11
Total Chromium		mg/L	1.00	1.00	100	90 - 110	2004-07-11
Total Copper		mg/L	1.00	0.988	99	90 - 110	2004-07-11
Total Iron		mg/L	1.00	0.970	97	90 - 110	2004-07-11

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Manganese		mg/L	1.00	0.952	95	90 - 110	2004-07-11
Total Molybdenum		mg/L	1.00	1.03	103	90 - 110	2004-07-11
Total Nickel		mg/L	1.00	0.961	96	90 - 110	2004-07-11
Total Phosphorous		mg/L	5.00	5.05	101	90 - 110	2004-07-11
Total Lead		mg/L	1.00	0.948	95	90 - 110	2004-07-11
Total Selenium		mg/L	1.00	0.962	96	90 - 110	2004-07-11
Total Silica		mg/L	5.00	5.11	102	90 - 110	2004-07-11
Total Tin		mg/L	1.00	0.996	100	90 - 110	2004-07-11
Total Strontium		mg/L	1.00	0.955	96	90 - 110	2004-07-11
Total Vanadium		mg/L	1.00	1.00	100	90 - 110	2004-07-11
Total Zinc		mg/L	1.00	0.988	99	90 - 110	2004-07-11

Standard (CCV-1) QC Batch: 10968

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.117	94	90 - 110	2004-07-11
Total Aluminum		mg/L	1.00	0.910	91	90 - 110	2004-07-11
Total Arsenic		mg/L	1.00	0.971	97	90 - 110	2004-07-11
Total Boron		mg/L	1.00	1.02	102	90 - 110	2004-07-11
Total Barium		mg/L	1.00	0.936	94	90 - 110	2004-07-11
Total Beryllium		mg/L	1.00	0.978	98	90 - 110	2004-07-11
Total Cadmium		mg/L	1.00	0.949	95	90 - 110	2004-07-11
Total Cobalt		mg/L	1.00	0.939	94	90 - 110	2004-07-11
Total Chromium		mg/L	1.00	0.996	100	90 - 110	2004-07-11
Total Copper		mg/L	1.00	0.952	95	90 - 110	2004-07-11
Total Iron		mg/L	1.00	0.936	94	90 - 110	2004-07-11
Total Manganese		mg/L	1.00	0.938	94	90 - 110	2004-07-11
Total Molybdenum		mg/L	1.00	0.969	97	90 - 110	2004-07-11
Total Nickel		mg/L	1.00	0.927	93	90 - 110	2004-07-11
Total Phosphorous		mg/L	5.00	4.97	99	90 - 110	2004-07-11
Total Lead		mg/L	1.00	0.951	95	90 - 110	2004-07-11
Total Selenium		mg/L	1.00	0.931	93	90 - 110	2004-07-11
Total Silica		mg/L	5.00	5.12	102	90 - 110	2004-07-11
Total Tin		mg/L	1.00	0.915	92	90 - 110	2004-07-11
Total Strontium		mg/L	1.00	0.928	93	90 - 110	2004-07-11
Total Vanadium		mg/L	1.00	1.01	101	90 - 110	2004-07-11
Total Zinc		mg/L	1.00	0.960	96	90 - 110	2004-07-11

Standard (ICV-1) QC Batch: 10970

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.122	98	90 - 110	2004-07-11
Total Aluminum		mg/L	1.00	0.945	94	90 - 110	2004-07-11
Total Arsenic		mg/L	1.00	1.00	100	90 - 110	2004-07-11
Total Boron		mg/L	1.00	1.03	103	90 - 110	2004-07-11

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Barium		mg/L	1.00	0.952	95	90 - 110	2004-07-11
Total Beryllium		mg/L	1.00	1.04	104	90 - 110	2004-07-11
Total Cadmium		mg/L	1.00	0.985	98	90 - 110	2004-07-11
Total Cobalt		mg/L	1.00	0.965	96	90 - 110	2004-07-11
Total Chromium		mg/L	1.00	1.00	100	90 - 110	2004-07-11
Total Copper		mg/L	1.00	0.988	99	90 - 110	2004-07-11
Total Iron		mg/L	1.00	0.970	97	90 - 110	2004-07-11
Total Manganese		mg/L	1.00	0.952	95	90 - 110	2004-07-11
Total Molybdenum		mg/L	1.00	1.03	103	90 - 110	2004-07-11
Total Nickel		mg/L	1.00	0.961	96	90 - 110	2004-07-11
Total Phosphorous		mg/L	5.00	5.05	101	90 - 110	2004-07-11
Total Lead		mg/L	1.00	0.948	95	90 - 110	2004-07-11
Total Selenium		mg/L	1.00	0.962	96	90 - 110	2004-07-11
Total Silica		mg/L	5.00	5.11	102	90 - 110	2004-07-11
Total Tin		mg/L	1.00	0.996	100	90 - 110	2004-07-11
Total Strontium		mg/L	1.00	0.955	96	90 - 110	2004-07-11
Total Vanadium		mg/L	1.00	1.00	100	90 - 110	2004-07-11
Total Zinc		mg/L	1.00	0.988	99	90 - 110	2004-07-11

Standard (CCV-1) QC Batch: 10970

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.117	94	90 - 110	2004-07-11
Total Aluminum		mg/L	1.00	0.952	95	90 - 110	2004-07-11
Total Arsenic		mg/L	1.00	0.969	97	90 - 110	2004-07-11
Total Boron		mg/L	1.00	1.02	102	90 - 110	2004-07-11
Total Barium		mg/L	1.00	0.951	95	90 - 110	2004-07-11
Total Beryllium		mg/L	1.00	0.992	99	90 - 110	2004-07-11
Total Cadmium		mg/L	1.00	0.956	96	90 - 110	2004-07-11
Total Cobalt		mg/L	1.00	0.957	96	90 - 110	2004-07-11
Total Chromium		mg/L	1.00	1.02	102	90 - 110	2004-07-11
Total Copper		mg/L	1.00	0.962	96	90 - 110	2004-07-11
Total Iron		mg/L	1.00	0.946	95	90 - 110	2004-07-11
Total Manganese		mg/L	1.00	0.961	96	90 - 110	2004-07-11
Total Molybdenum		mg/L	1.00	0.958	96	90 - 110	2004-07-11
Total Nickel		mg/L	1.00	0.956	96	90 - 110	2004-07-11
Total Phosphorous		mg/L	5.00	4.87	97	90 - 110	2004-07-11
Total Lead		mg/L	1.00	0.937	94	90 - 110	2004-07-11
Total Selenium		mg/L	1.00	1.02	102	90 - 110	2004-07-11
Total Silica		mg/L	5.00	4.96	99	90 - 110	2004-07-11
Total Tin		mg/L	1.00	0.966	97	90 - 110	2004-07-11
Total Strontium		mg/L	1.00	0.948	95	90 - 110	2004-07-11
Total Vanadium		mg/L	1.00	0.974	97	90 - 110	2004-07-11
Total Zinc		mg/L	1.00	0.963	96	90 - 110	2004-07-11

Standard (ICV-1) QC Batch: 11293

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.125	100	90 - 110	2004-07-26
Total Aluminum		mg/L	1.00	0.990	99	90 - 110	2004-07-26
Total Arsenic		mg/L	1.00	0.995	100	90 - 110	2004-07-26
Total Boron		mg/L	1.00	1.05	105	90 - 110	2004-07-26
Total Barium		mg/L	1.00	0.997	100	90 - 110	2004-07-26
Total Beryllium		mg/L	1.00	1.01	101	90 - 110	2004-07-26
Total Cadmium		mg/L	1.00	1.00	100	90 - 110	2004-07-26
Total Cobalt		mg/L	1.00	0.992	99	90 - 110	2004-07-26
Total Chromium		mg/L	1.00	0.998	100	90 - 110	2004-07-26
Total Copper		mg/L	1.00	0.996	100	90 - 110	2004-07-26
Total Iron		mg/L	1.00	0.991	99	90 - 110	2004-07-26
Total Manganese		mg/L	1.00	1.00	100	90 - 110	2004-07-26
Total Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-07-26
Total Nickel		mg/L	1.00	1.00	100	90 - 110	2004-07-26
Total Phosphorous		mg/L	5.00	5.00	100	90 - 110	2004-07-26
Total Lead		mg/L	1.00	1.00	100	90 - 110	2004-07-26
Total Selenium		mg/L	1.00	1.00	100	90 - 110	2004-07-26
Total Silica		mg/L	5.00	4.82	96	90 - 110	2004-07-26
Total Tin		mg/L	1.00	1.01	101	90 - 110	2004-07-26
Total Strontium		mg/L	1.00	1.00	100	90 - 110	2004-07-26
Total Vanadium		mg/L	1.00	0.994	99	90 - 110	2004-07-26
Total Zinc		mg/L	1.00	1.00	100	90 - 110	2004-07-26

Standard (CCV-1) QC Batch: 11293

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.122	98	90 - 110	2004-07-26
Total Aluminum		mg/L	1.00	0.964	96	90 - 110	2004-07-26
Total Arsenic		mg/L	1.00	0.985	98	90 - 110	2004-07-26
Total Boron		mg/L	1.00	0.979	98	90 - 110	2004-07-26
Total Barium		mg/L	1.00	0.987	99	90 - 110	2004-07-26
Total Beryllium		mg/L	1.00	0.990	99	90 - 110	2004-07-26
Total Cadmium		mg/L	1.00	0.981	98	90 - 110	2004-07-26
Total Cobalt		mg/L	1.00	0.982	98	90 - 110	2004-07-26
Total Chromium		mg/L	1.00	0.983	98	90 - 110	2004-07-26
Total Copper		mg/L	1.00	0.974	97	90 - 110	2004-07-26
Total Iron		mg/L	1.00	0.979	98	90 - 110	2004-07-26
Total Manganese		mg/L	1.00	0.986	99	90 - 110	2004-07-26
Total Molybdenum		mg/L	1.00	0.980	98	90 - 110	2004-07-26
Total Nickel		mg/L	1.00	0.982	98	90 - 110	2004-07-26
Total Phosphorous		mg/L	5.00	5.04	101	90 - 110	2004-07-26
Total Lead		mg/L	1.00	0.989	99	90 - 110	2004-07-26
Total Selenium		mg/L	1.00	0.985	98	90 - 110	2004-07-26
Total Silica		mg/L	5.00	4.92	98	90 - 110	2004-07-26
Total Tin		mg/L	1.00	1.00	100	90 - 110	2004-07-26
Total Strontium		mg/L	1.00	0.994	99	90 - 110	2004-07-26
Total Vanadium		mg/L	1.00	0.975	98	90 - 110	2004-07-26
Total Zinc		mg/L	1.00	0.986	99	90 - 110	2004-07-26

Standard (ICV-1) QC Batch: 11385

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.119	95	90 - 110	2004-07-28
Total Aluminum		mg/L	1.00	0.966	97	90 - 110	2004-07-28
Total Arsenic		mg/L	1.00	0.950	95	90 - 110	2004-07-28
Total Boron		mg/L	1.00	0.977	98	90 - 110	2004-07-28
Total Barium		mg/L	1.00	0.981	98	90 - 110	2004-07-28
Total Beryllium		mg/L	1.00	0.972	97	90 - 110	2004-07-28
Total Cadmium		mg/L	1.00	0.971	97	90 - 110	2004-07-28
Total Cobalt		mg/L	1.00	0.949	95	90 - 110	2004-07-28
Total Chromium		mg/L	1.00	0.971	97	90 - 110	2004-07-28
Total Copper		mg/L	1.00	0.972	97	90 - 110	2004-07-28
Total Iron		mg/L	1.00	0.970	97	90 - 110	2004-07-28
Total Manganese		mg/L	1.00	0.952	95	90 - 110	2004-07-28
Total Molybdenum		mg/L	1.00	1.01	101	90 - 110	2004-07-28
Total Nickel		mg/L	1.00	0.950	95	90 - 110	2004-07-28
Total Phosphorous		mg/L	5.00	4.66	93	90 - 110	2004-07-28
Total Lead		mg/L	1.00	0.988	99	90 - 110	2004-07-28
Total Selenium		mg/L	1.00	0.943	94	90 - 110	2004-07-28
Total Silica		mg/L	5.00	4.90	98	90 - 110	2004-07-28
Total Tin		mg/L	1.00	0.923	92	90 - 110	2004-07-28
Total Strontium		mg/L	1.00	0.980	98	90 - 110	2004-07-28
Total Vanadium		mg/L	1.00	0.947	95	90 - 110	2004-07-28
Total Zinc		mg/L	1.00	0.963	96	90 - 110	2004-07-28

Standard (CCV-1) QC Batch: 11385

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.118	94	90 - 110	2004-07-28
Total Aluminum		mg/L	1.00	0.930	93	90 - 110	2004-07-28
Total Arsenic		mg/L	1.00	0.981	98	90 - 110	2004-07-28
Total Boron		mg/L	1.00	0.985	98	90 - 110	2004-07-28
Total Barium		mg/L	1.00	0.951	95	90 - 110	2004-07-28
Total Beryllium		mg/L	1.00	0.977	98	90 - 110	2004-07-28
Total Cadmium		mg/L	1.00	0.966	97	90 - 110	2004-07-28
Total Cobalt		mg/L	1.00	0.960	96	90 - 110	2004-07-28
Total Chromium		mg/L	1.00	0.976	98	90 - 110	2004-07-28
Total Copper		mg/L	1.00	0.961	96	90 - 110	2004-07-28
Total Iron		mg/L	1.00	0.970	97	90 - 110	2004-07-28
Total Manganese		mg/L	1.00	0.951	95	90 - 110	2004-07-28
Total Molybdenum		mg/L	1.00	0.999	100	90 - 110	2004-07-28
Total Nickel		mg/L	1.00	0.959	96	90 - 110	2004-07-28
Total Phosphorous		mg/L	5.00	4.86	97	90 - 110	2004-07-28
Total Lead		mg/L	1.00	1.01	101	90 - 110	2004-07-28
Total Selenium		mg/L	1.00	0.957	96	90 - 110	2004-07-28
Total Silica		mg/L	5.00	5.01	100	90 - 110	2004-07-28
Total Tin		mg/L	1.00	0.956	96	90 - 110	2004-07-28
Total Strontium		mg/L	1.00	0.944	94	90 - 110	2004-07-28
Total Vanadium		mg/L	1.00	0.942	94	90 - 110	2004-07-28

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		mg/L	1.00	0.961	96	90 - 110	2004-07-28

Analytical and Quality Control Report

Benitos Avalos
BAE Systems
P.O. Box 399
Building 126
WSMR, NM 88002

Report Date: August 16, 2004

Work Order: 4063009

Project Location: HELSTF Const. Landfill
Project Number: 20-EE

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
37745	HLSF-3839-HMW-035-0604	water	2004-06-29	13:44	2004-06-29
37746	HLSF-3839-TB-336	water	2004-06-29	13:44	2004-06-29
37911	HLSF-3839-HMW-034-0604	water	2004-07-01	14:51	2004-07-01
37912	HLSF-3839-TB-335	water	2004-07-01	14:51	2004-07-01
38118	HLSF-3839-HMW-029-0604	water	2004-07-06	13:40	2004-07-06
38119	HLSF-3839-TB-331	water	2004-07-06	13:40	2004-07-06
39196	HLSF-3839-HMW-032-0604	water	2004-07-19	15:00	2004-07-19
39197	HLSF-3839-TB-332	water	2004-07-19	15:00	2004-07-19
39334	HLSF-3839-HMW-033-0704	water	2004-07-20	14:00	2004-07-20
39335	HLSF-3839-TB-333	water	2004-07-20	14:00	2004-07-20
39336	HLSF-3839-HMW-133-0704	water	2004-07-20	14:00	2004-07-20
39337	HLSF-3839-TB-334	water	2004-07-20	14:00	2004-07-20

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 31 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 37745 - HLSF-3839-HMW-035-0604

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11010	Date Analyzed:	2004-07-06	Analyzed By:	JG
Prep Batch:	9732	Date Prepared:	2004-07-06	Prepared By:	JG

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

continued . . .

sample 37745 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.8	μg/L	1	50.0	106	70 - 130
Toluene-d8		50.2	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		43.1	μg/L	1	50.0	86	70 - 130

Sample: 37746 - HLSF-3839-TB-336

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11010	Date Analyzed:	2004-07-06	Analyzed By:	JG
Prep Batch:	9732	Date Prepared:	2004-07-06	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00

continued . . .

sample 37746 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		1.88	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		<1.00	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00

continued . . .

sample 37746 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.8	μg/L	1	50.0	104	70 - 130
Toluene-d8		50.2	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		43.5	μg/L	1	50.0	87	70 - 130

Sample: 37911 - HLSF-3839-HMW-034-0604

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11010	Date Analyzed:	2004-07-06	Analyzed By:	JG
Prep Batch:	9732	Date Prepared:	2004-07-06	Prepared By:	JG

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

continued . . .

sample 37911 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.5	μg/L	1	50.0	105	70 - 130
Toluene-d8		50.2	μg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		43.3	μg/L	1	50.0	87	70 - 130

Sample: 37912 - HLSF-3839-TB-335

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11010	Date Analyzed:	2004-07-06	Analyzed By:	JG
Prep Batch:	9732	Date Prepared:	2004-07-06	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		1.76	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00

continued . . .

sample 37912 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.1	μg/L	1	50.0	104	70 - 130
Toluene-d8		49.7	μg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		43.5	μg/L	1	50.0	87	70 - 130

Sample: 38118 - HLSF-3839-HMW-029-0604

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11078	Date Analyzed:	2004-07-13	Analyzed By:	JG
Prep Batch:	9794	Date Prepared:	2004-07-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00

continued . . .

sample 38118 continued . . .

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

continued . . .

sample 38118 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.6	μg/L	1	50.0	109	70 - 130
Toluene-d8		51.4	μg/L	1	50.0	103	70 - 130
4-Bromofluorobenzene (4-BFB)		44.1	μg/L	1	50.0	88	70 - 130

Sample: 38119 - HLSF-3839-TB-331

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11078	Date Analyzed:	2004-07-13	Analyzed By:	JG
Prep Batch:	9794	Date Prepared:	2004-07-13	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		28.8	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		<1.00	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00

continued . . .

sample 38119 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.9	μg/L	1	50.0	108	70 - 130
Toluene-d8		51.5	μg/L	1	50.0	103	70 - 130
4-Bromofluorobenzene (4-BFB)		44.5	μg/L	1	50.0	89	70 - 130

Sample: 39196 - HLSF-3839-HMW-032-0604

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11397	Date Analyzed:	2004-07-26	Analyzed By:	JG
Prep Batch:	10074	Date Prepared:	2004-07-26	Prepared By:	JG

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

continued . . .

sample 39196 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.6	μg/L	1	50.0	99	70 - 130
Toluene-d8		52.9	μg/L	1	50.0	106	70 - 130
4-Bromofluorobenzene (4-BFB)		51.0	μg/L	1	50.0	102	70 - 130

Sample: 39197 - HLSF-3839-TB-332

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11397	Date Analyzed:	2004-07-26	Analyzed By:	JG
Prep Batch:	10074	Date Prepared:	2004-07-26	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		27.7	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00

continued . . .

sample 39197 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		2.47	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		<1.00	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00

continued . . .

sample 39197 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.7	μg/L	1	50.0	97	70 - 130
Toluene-d8		51.8	μg/L	1	50.0	104	70 - 130
4-Bromofluorobenzene (4-BFB)		51.0	μg/L	1	50.0	102	70 - 130

Sample: 39334 - HLSF-3839-HMW-033-0704

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11397	Date Analyzed:	2004-07-26	Analyzed By:	JG
Prep Batch:	10074	Date Prepared:	2004-07-26	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		6.09	μg/L	1	1.00
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		2.10	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		9.06	μg/L	1	1.00

continued . . .

sample 39334 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.7	μg/L	1	50.0	101	70 - 130
Toluene-d8		52.4	μg/L	1	50.0	105	70 - 130
4-Bromofluorobenzene (4-BFB)		49.5	μg/L	1	50.0	99	70 - 130

Sample: 39335 - HLSF-3839-TB-333

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11397	Date Analyzed:	2004-07-26	Analyzed By:	JG

Prep Batch: 10074 Date Prepared: 2004-07-26 Prepared By: JG

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

continued . . .

sample 39335 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.5	μg/L	1	50.0	101	70 - 130
Toluene-d8		52.4	μg/L	1	50.0	105	70 - 130
4-Bromofluorobenzene (4-BFB)		49.7	μg/L	1	50.0	99	70 - 130

Sample: 39336 - HLSF-3839-HMW-133-0704

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11397	Date Analyzed:	2004-07-26	Analyzed By:	JG
Prep Batch:	10074	Date Prepared:	2004-07-26	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		<10.0	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		5.72	μg/L	1	1.00

continued . . .

sample 39336 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Methylene chloride		<5.00	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		2.11	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		8.21	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		<1.00	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		<1.00	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00

continued . . .

sample 39336 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.9	μg/L	1	50.0	106	70 - 130
Toluene-d8		53.5	μg/L	1	50.0	107	70 - 130
4-Bromofluorobenzene (4-BFB)		47.9	μg/L	1	50.0	96	70 - 130

Sample: 39337 - HLSF-3839-TB-334

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	11522	Date Analyzed:	2004-07-30	Analyzed By:	JG
Prep Batch:	10183	Date Prepared:	2004-07-30	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	μg/L	1	1.00
Dichlorodifluoromethane		<1.00	μg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	μg/L	1	1.00
Vinyl Chloride		<1.00	μg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	μg/L	1	5.00
Chloroethane		<1.00	μg/L	1	1.00
Trichlorofluoromethane		<1.00	μg/L	1	1.00
Acetone		10.1	μg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	μg/L	1	5.00
Carbon Disulfide		<1.00	μg/L	1	1.00
Acrylonitrile		<1.00	μg/L	1	1.00
2-Butanone (MEK)		<5.00	μg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5.00
2-Hexanone		<5.00	μg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10.0
1,1-Dichloroethene		2.72	μg/L	1	1.00
Methylene chloride		29.8	μg/L	1	5.00
MTBE		<1.00	μg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	μg/L	1	1.00
1,1-Dichloroethane		<1.00	μg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	μg/L	1	1.00
2,2-Dichloropropane		<1.00	μg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1.00
Chloroform		<1.00	μg/L	1	1.00
1,1,1-Trichloroethane		<1.00	μg/L	1	1.00
1,1-Dichloropropene		<1.00	μg/L	1	1.00
Benzene		<1.00	μg/L	1	1.00
Carbon Tetrachloride		<1.00	μg/L	1	1.00
1,2-Dichloropropane		<1.00	μg/L	1	1.00
Trichloroethene (TCE)		<1.00	μg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1.00
Bromodichloromethane		<1.00	μg/L	1	1.00

continued . . .

sample 39337 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	μg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	μg/L	1	1.00
Toluene		1.76	μg/L	1	1.00
1,1,2-Trichloroethane		<1.00	μg/L	1	1.00
1,3-Dichloropropane		<1.00	μg/L	1	1.00
Dibromochloromethane		<1.00	μg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	μg/L	1	1.00
Chlorobenzene		<1.00	μg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1.00
Ethylbenzene		<1.00	μg/L	1	1.00
m,p-Xylene		<1.00	μg/L	1	1.00
Bromoform		<1.00	μg/L	1	1.00
Styrene		<1.00	μg/L	1	1.00
o-Xylene		<1.00	μg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1.00
2-Chlorotoluene		<1.00	μg/L	1	1.00
1,2,3-Trichloropropane		<1.00	μg/L	1	1.00
Isopropylbenzene		<1.00	μg/L	1	1.00
Bromobenzene		<1.00	μg/L	1	1.00
n-Propylbenzene		<1.00	μg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1.00
tert-Butylbenzene		<1.00	μg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1.00
sec-Butylbenzene		<1.00	μg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	μg/L	1	1.00
p-Isopropyltoluene		<1.00	μg/L	1	1.00
4-Chlorotoluene		<1.00	μg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1.00
n-Butylbenzene		<1.00	μg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5.00
Naphthalene		<5.00	μg/L	1	5.00
Hexachlorobutadiene		<5.00	μg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.0	μg/L	1	50.0	104	70 - 130
Toluene-d8		52.0	μg/L	1	50.0	104	70 - 130
4-Bromofluorobenzene (4-BFB)		47.2	μg/L	1	50.0	94	70 - 130

Method Blank (1) QC Batch: 11010

Parameter	Flag	Result	Units	RL
Bromochloromethane		<1.00	μg/L	1

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
Dichlorodifluoromethane		<1.00	μg/L	1
Chloromethane (methyl chloride)		<1.00	μg/L	1
Vinyl Chloride		<1.00	μg/L	1
Bromomethane (methyl bromide)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.9	μg/L	1	50.0	102	70 - 130
Toluene-d8		50.4	μg/L	1	50.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)		43.6	μg/L	1	50.0	87	70 - 130

Method Blank (1) QC Batch: 11078

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		56.9	μg/L	1	50.0	114	70 - 130
Toluene-d8		51.0	μg/L	1	50.0	102	70 - 130
4-Bromofluorobenzene (4-BFB)		44.0	μg/L	1	50.0	88	70 - 130

Method Blank (1) QC Batch: 11397

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.3	μg/L	1	50.0	99	70 - 130
Toluene-d8		51.5	μg/L	1	50.0	103	70 - 130
4-Bromofluorobenzene (4-BFB)		50.2	μg/L	1	50.0	100	70 - 130

Method Blank (1) QC Batch: 11522

Parameter	Flag	Result	Units	RL
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)		<5.00	μg/L	5
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<5.00	μg/L	5
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

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	RL
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 (meta)		<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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.5	μg/L	1	50.0	103	70 - 130

continued . . .

method blank continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Toluene-d8		51.8	μg/L	1	50.0	104	70 - 130
4-Bromofluorobenzene (4-BFB)		46.8	μg/L	1	50.0	94	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11010

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	102	103	μg/L	1	100	<0.136	102	1	70 - 130	20
Benzene	102	103	μg/L	1	100	0.17	102	1	70 - 130	20
Trichloroethene (TCE)	97.7	98.3	μg/L	1	100	0.16	98	1	70 - 130	20
Toluene	98.6	100	μg/L	1	100	0.34	99	1	70 - 130	20
Chlorobenzene	101	101	μg/L	1	100	<0.0540	101	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.6	50.8	μg/L	1	50.0	101	102	70 - 130
Toluene-d8	50.1	50.1	μg/L	1	50.0	100	100	70 - 130
4-Bromofluorobenzene (4-BFB)	45.0	44.6	μg/L	1	50.0	90	89	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11078

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	102	103	μg/L	1	100	<0.136	102	1	70 - 130	20
Benzene	113	115	μg/L	1	100	<0.146	113	2	70 - 130	20
Trichloroethene (TCE)	104	104	μg/L	1	100	0.14	104	0	70 - 130	20
Toluene	108	110	μg/L	1	100	0.15	108	2	70 - 130	20
Chlorobenzene	109	110	μg/L	1	100	<0.0540	109	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	49.5	53.0	μg/L	1	50.0	99	106	70 - 130
Toluene-d8	51.1	50.4	μg/L	1	50.0	102	101	70 - 130
4-Bromofluorobenzene (4-BFB)	45.1	44.3	μg/L	1	50.0	90	89	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11397

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	94.8	95.9	μg/L	1	100	<0.136	95	1	70 - 130	20
Benzene	100	101	μg/L	1	100	<0.146	100	1	70 - 130	20
Trichloroethene (TCE)	100	101	μg/L	1	100	0.15	100	1	70 - 130	20
Toluene	99.3	100	μg/L	1	100	0.22	99	1	70 - 130	20
Chlorobenzene	102	101	μg/L	1	100	<0.0540	102	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	48.6	49.0	μg/L	1	50.0	97	98	70 - 130
Toluene-d8	52.0	51.8	μg/L	1	50.0	104	104	70 - 130
4-Bromofluorobenzene (4-BFB)	51.1	50.0	μg/L	1	50.0	102	100	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 11522

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	99.1	98.8	μg/L	1	100	0.14	99	0	70 - 130	20
Benzene	101	101	μg/L	1	100	<0.146	101	0	70 - 130	20
Trichloroethene (TCE)	98.7	98.7	μg/L	1	100	0.13	99	0	70 - 130	20
Toluene	99.8	101	μg/L	1	100	0.17	100	1	70 - 130	20
Chlorobenzene	102	102	μg/L	1	100	<0.0540	102	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.8	50.8	μg/L	1	50.0	102	102	70 - 130
Toluene-d8	51.6	52.0	μg/L	1	50.0	103	104	70 - 130
4-Bromofluorobenzene (4-BFB)	48.3	47.9	μg/L	1	50.0	97	96	70 - 130

Matrix Spike (MS-1) QC Batch: 11010

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	104	106	μg/L	1	100	<0.136	104	2	70 - 130	20
Benzene	105	106	μg/L	1	100	<0.146	105	1	70 - 130	20
Trichloroethene (TCE)	98.5	99.4	μg/L	1	100	<0.117	98	1	70 - 130	20
Toluene	102	103	μg/L	1	100	<0.0600	102	1	70 - 130	20
Chlorobenzene	102	103	μg/L	1	100	<0.0540	102	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	52.6	53.0	μg/L	1	50	105	106	70 - 130
Toluene-d8	49.8	50.2	μg/L	1	50	100	100	70 - 130
4-Bromofluorobenzene (4-BFB)	44.4	44.2	μg/L	1	50	89	88	70 - 130

Matrix Spike (MS-1) QC Batch: 11078

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	106	104	μg/L	1	100	<0.136	106	2	70 - 130	20
Benzene	117	119	μg/L	1	100	<0.146	117	2	70 - 130	20
Trichloroethene (TCE)	106	108	μg/L	1	100	<0.117	106	2	70 - 130	20
Toluene	114	114	μg/L	1	100	<0.0600	114	0	70 - 130	20

continued . . .

matrix spikes continued . . .

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chlorobenzene	111	112	μg/L	1	100	<0.0540	111	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	54.3	57.2	μg/L	1	50	109	114	70 - 130
Toluene-d8	50.8	50.7	μg/L	1	50	102	101	70 - 130
4-Bromofluorobenzene (4-BFB)	44.0	44.1	μg/L	1	50	88	88	70 - 130

Matrix Spike (MS-1) QC Batch: 11522

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
1,1-Dichloroethene	105	104	μg/L	1	100	<0.136	105	1	70 - 130	20
Benzene	104	105	μg/L	1	100	<0.146	104	1	70 - 130	20
Trichloroethene (TCE)	99.0	99.4	μg/L	1	100	<0.117	99	0	70 - 130	20
Toluene	104	104	μg/L	1	100	<0.0600	104	0	70 - 130	20
Chlorobenzene	105	104	μg/L	1	100	<0.0540	105	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	52.8	52.9	μg/L	1	50	106	106	70 - 130
Toluene-d8	51.4	51.2	μg/L	1	50	103	102	70 - 130
4-Bromofluorobenzene (4-BFB)	45.6	45.6	μg/L	1	50	91	91	70 - 130

Standard (CCV-1) QC Batch: 11010

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	49.5	99	80 - 120	2004-07-06
1,1-Dichloroethene		μg/L	50.0	50.4	101	80 - 120	2004-07-06
Chloroform		μg/L	50.0	51.8	104	80 - 120	2004-07-06
1,2-Dichloropropane		μg/L	50.0	54.5	109	80 - 120	2004-07-06
Toluene		μg/L	50.0	53.0	106	80 - 120	2004-07-06
Chlorobenzene		μg/L	50.0	51.7	103	80 - 120	2004-07-06
Ethylbenzene		μg/L	50.0	55.1	110	80 - 120	2004-07-06

Standard (CCV-1) QC Batch: 11078

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	51.9	104	80 - 120	2004-07-13
1,1-Dichloroethene		μg/L	50.0	47.1	94	80 - 120	2004-07-13
Chloroform		μg/L	50.0	50.9	102	80 - 120	2004-07-13
1,2-Dichloropropane		μg/L	50.0	58.3	117	80 - 120	2004-07-13

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		μg/L	50.0	53.7	107	80 - 120	2004-07-13
Chlorobenzene		μg/L	50.0	51.8	104	80 - 120	2004-07-13
Ethylbenzene		μg/L	50.0	55.9	112	80 - 120	2004-07-13

Standard (CCV-1) QC Batch: 11397

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	49.3	99	80 - 120	2004-07-26
1,1-Dichloroethene		μg/L	50.0	45.1	90	80 - 120	2004-07-26
Chloroform		μg/L	50.0	51.2	102	80 - 120	2004-07-26
1,2-Dichloropropane		μg/L	50.0	57.1	114	80 - 120	2004-07-26
Toluene		μg/L	50.0	51.1	102	80 - 120	2004-07-26
Chlorobenzene		μg/L	50.0	51.2	102	80 - 120	2004-07-26
Ethylbenzene		μg/L	50.0	55.1	110	80 - 120	2004-07-26

Standard (CCV-1) QC Batch: 11522

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	50.0	52.7	105	80 - 120	2004-07-30
1,1-Dichloroethene		μg/L	50.0	47.2	94	80 - 120	2004-07-30
Chloroform		μg/L	50.0	53.1	106	80 - 120	2004-07-30
1,2-Dichloropropane		μg/L	50.0	60.1	120	80 - 120	2004-07-30
Toluene		μg/L	50.0	52.7	105	80 - 120	2004-07-30
Chlorobenzene		μg/L	50.0	51.6	103	80 - 120	2004-07-30
Ethylbenzene		μg/L	50.0	56.5	113	80 - 120	2004-07-30