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HALEY & ALDRICH

ENGLAND GEOSYSTEM
ENVIRONMENTAL ENGINEERING

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

TECHNICAL MEMORANDUM

STOCKPILE PLACEMENT/DISPOSITION EVALUATION
STOCKPILES SP-13, SP-15, AND SP-16

To: **Mr. Brian Mossman**
Boeing Realty Corporation
3855 Lakewood Blvd.
Building 1A MC D001-0097
Long Beach, CA 90846

From: **Haley & Aldrich, Inc.**

Date: **August 29, 2001**

Re: **Stockpile Placement/Disposition Evaluation, Boeing Realty Corporation, Stockpiles SP-13, SP-15, and SP-16, Former C-6 Facility – Parcel C, Los Angeles, California**

Haley & Aldrich, Inc. is herein providing this technical memorandum to summarize our recommendations regarding the onsite placement and offsite transport of temporarily stockpiled excavated materials at Parcel C of the Boeing Realty Corporation's (BRC's) Former C-6 Facility in Los Angeles, California (subject parcel). These stockpiles are herein identified as Stockpiles SP-13, SP-15, and SP-16.

OVERVIEW/PURPOSE

Potentially impacted materials identified during demolition monitoring activities have been excavated to expedite potential onsite remediation activities, thus, reducing the potential for affecting the current redevelopment schedule at the subject parcel. These materials were segregated by the location from which they were excavated and by known or suspected chemical impacts. Representative samples collected from these materials were evaluated using human health risk assessment and groundwater protection evaluation procedures to determine which of the temporary soil stockpiles could be reused onsite and which should be transported offsite to regulated treatment/disposal facilities. The evaluation methodology and the onsite placement/offsite transport recommendations are presented herein.

IDENTIFICATION OF STOCKPILED SOIL

Materials, comprised primarily of soils, were identified for excavation based on field observations and the results of in-situ samples collected and analyzed following the Los Angeles Regional Water Quality Control Board (LARWQCB)-approved sampling and analysis plan for the subject parcel and the subsequent LARWQCB-approved addendum and supplements.

Stockpile SP-13 is comprised of soil cuttings generated during onsite SimulProbe drilling activities. Stockpiles SP-15 and SP-16 were generated from onsite excavations. Each of these stockpiles is comprised of soil. Stockpile SP-13 contains approximately 10 cubic yards of soil. Stockpile SP-15 contains approximately 30 cubic yards of soil, and stockpile SP-16 contains approximately 50 cubic yards of soil.

STOCKPILE CHARACTERIZATION METHODOLOGY

Two representative samples were obtained from each of the three stockpiles. The samples obtained from stockpiles SP-13 and SP-15 are discrete samples. Each sample obtained from stockpile SP-16 is a composite of three samples. Each of sample was tested for suspected chemical constituents following the protocols presented in the LARWQCB-approved sampling and analysis plan for the subject parcel and the subsequent LARWQCB-approved addendum and supplements.

STOCKPILE EVALUATION METHODOLOGY

The stockpile sample results were evaluated using screening human health risk assessment (SRA) procedures as described in the November 29, 2000 Risk Assessment Work Plan (RAWP) for the subject parcel following the decision process summarized in Figure 1. In addition, maximum volatile organic compound (VOC) concentrations for each stockpile or stockpile segment was evaluated to assess whether VOC concentrations in the stockpiles have the potential to degrade existing groundwater quality. The evaluation procedures used herein are similar to those used during the placement evaluation of stockpiles SP-1 through SP-12, and SP-14.

Human Health Risk Evaluation

The maximum concentrations detected in each stockpile were separately compared to the maximum concentrations detected within each of three areas of subject parcel. These three areas of the subject parcel are identified as the Building 1 Exposure Area, the Building 2 Exposure Area, and the Parcel C Exposure Area (Figure 2). The Building 1 and 2 Exposure Areas are defined by two areas of elevated VOC impacts at and in proximity to former Buildings 1 and 2, respectively. The remaining portion of the subject parcel (Parcel C Exposure Area) contains relatively lower chemical concentrations and/or smaller impacted areas. Where the stockpile concentrations were greater than the maximum in-situ concentrations they were used in the SRA calculations to assess whether adding the stockpile to that area resulted in risk above the LARWQCB- and Office of Environmental Health Hazard Assessment (OEHHA)-approved target risk levels.

Groundwater Protection Evaluation

Even though shallow groundwater beneath and in proximity to the subject parcel is not used as a domestic water supply, the evaluation conservatively assumed potential downward chemical migration from soil resulting in possible degradation of the Bellflower aquitard to levels greater than the California drinking water standards (i.e. Maximum Contaminant Levels [MCLs]). The assessment was conducted assuming a conservative scenario regarding chemical migration and mixing in groundwater following approved EPA and LARWQCB methodology and assumptions.

BOE-C6-0233052

This evaluation was conducted by comparing maximum VOC concentrations to site-specific soil screening levels (SSLs) derived from primary MCLs.

Initial site-specific SSLs were derived using the formula presented in Section 2.5 of the EPA document entitled *Soil Screening Guidance: Technical Background Document (TBD),* dated July 1996, and site-specific geotechnical parameters. The EPA SSL equation is a partitioning formula, which does not account for chemical attenuation during migration in soil or mixing with groundwater. To better represent contaminant migration in the soil column, an attenuation factor of 13 was applied to the initial SSL. This attenuation factor was obtained from Table 5-14 of the LARWQCB's May 1996 *Interim Site Assessment & Cleanup Guidebook*, assuming site-specific average soil particle size distributions, and a distance of 53 feet from soil impacts to the groundwater table (i.e., stockpiled material to be placed onsite at a maximum depth of 12 feet below ground surface (bgs) or shallower, and the water table is located at a depth of 65 feet bgs). An EPA default dilution attenuation factor (DAF) of 20 was also applied to the initial SSL to account for limited groundwater mixing. This EPA default value is presented in the above-referenced July 1996 EPA document, and was used by EPA to develop generic SSLs. The resulting site-specific SSL is, thus, equal to the initial SSL (assuming no soil attenuation or groundwater mixing) multiplied by the product of a soil attenuation factor of 13 and a groundwater mixing factor of 20.

RECOMMENDATIONS

The recommendation for onsite reuse of each stockpile is based on whether the target risk levels of the area of the subject parcel are exceeded after addition of the maximum concentrations detected in that stockpile and on whether maximum VOC concentrations may degrade groundwater quality to concentrations greater than MCLs. If the estimated risk remains below the target risk levels for that area of the subject parcel and VOC concentrations would not degrade groundwater quality to concentrations greater than MCLs, it is recommended that the stockpile be reused in that area of the subject parcel. If the estimated risk is greater than a target risk level or if VOC concentrations may degrade groundwater quality to concentrations greater than MCLs, it is recommended that the stockpile be transported offsite at a regulated treatment/disposal facility.

A summary of the recommendations for the stockpiles is presented in Table 1. The laboratory data for the stockpile samples is presented in Appendix A, and the SSL calculations are presented in Appendix B.

BOE-C6-0233053

Should you have any questions concerning the contents of this memorandum or require additional information, please contact either of the undersigned.

Sincerely yours,
HALEY & ALDRICH, INC.

Anita Broughton, REA, CIH
Risk Assessment Task Manager

Richard M. Farson, PE
Senior Engineer

THE AMERICAN BOARD OF INDUSTRIAL HYGIENE INCORPORATED
CERT. NO. 5682 CP
EXPIRES 12-31-2004
PENNSYLVANIA - 1960
ANITA BRENCE BROUGHTON, CIH

REGISTERED PROFESSIONAL ENGINEER
RICHARD M. FARSON
47269
EXPIRES 12/31/03
CIVIL
STATE OF CALIFORNIA

Attachments:

Figure 1	Soil Stockpile Reuse Protocol
Figure 2	Parcel C Exposure Areas
Table 1	Recommendations for Stockpiles SP-12 and SP-14
Appendix A	Laboratory Reports
Appendix B	Soil Screening Level (SSL) Calculations

Boeing Realty Corporation
3760 Kilroy Airport Way, Suite 500
Long Beach, CA 90806
Telephone: 562-627-4900
FAX: 562-627-4906

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7 September 2001
C6-BRC-T-01-019

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

BOEING

Attention: John Geroch

Subject: **STOCKPILE PLACEMENT/DISPOSITION EVALUATION, SP-13, SP-15 AND SP-16 FOR BOEING REALTY CORPORATION, FORMER C-6 FACILITY, 19503 SOUTH NORMANDIE AVENUE, LOS ANGELES, CA**

Dear Mr. Geroch:

Please find enclosed for your review, a copy of the subject document prepared by Haley & Aldrich, Inc. for Boeing Realty Corporation.

If you have any questions concerning this document, please contact the undersigned at 562-593-8623.

Sincerely,

Stephanie Sibbett
Boeing Realty Corporation

Cc: Mario Stavale, Boeing Realty Corporation

enclosure

Tables

Table 1
Recommendations for Stockpiles SP-13, SP-15, and SP-16
BRC Former C-6 Facility, Los Angeles, California

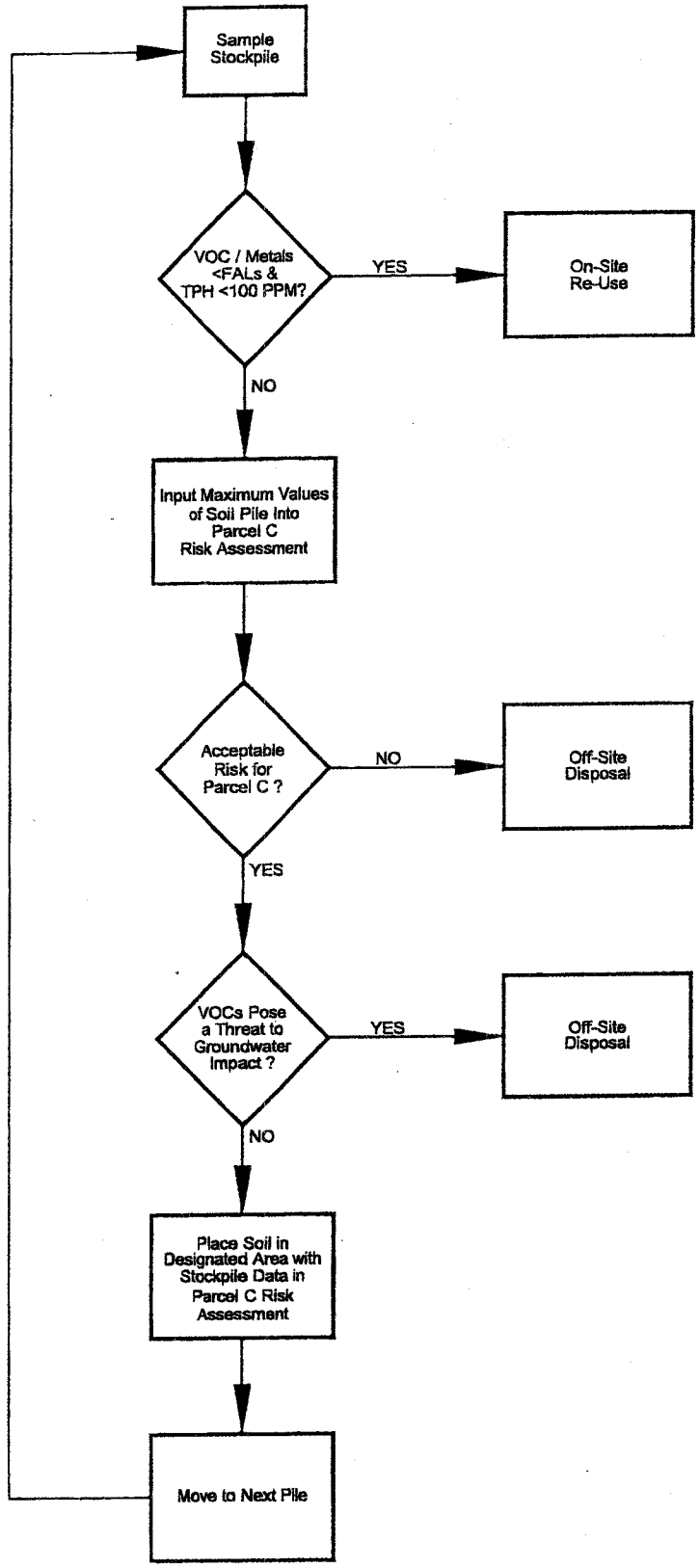
Stockpile No.	Sample IDs	Approx. Volume	Analyses	Acceptable for Onsite Reuse? (Yes or No)	Restrictions on Parcel C Placement?	Recommendations
SP-13	SP#13 (Southwest), SP#13 (North)	~ 10 cy	Metals, VOCs, PAHs, TPH	Yes	None	Acceptable for reuse in any portion of Parcel C. Addition of analyte concentrations result in health risk below target (acceptable) risk levels. VOCs are less than the laboratory detection limits, and thus, do not pose a threat to groundwater quality at levels
SP-15	SP_15_3_080910, SP_15_4_080901	~ 30 cy	Metals, VOCs, SVOCs, PAHs, TPH	Yes	None	Acceptable for reuse in any portion of Parcel C. Addition of VOC and SVOC concentrations result in health risk below target risk levels, and detected VOCs do not pose a threat to groundwater quality at levels greater than MCLs.
SP-16	SP_16_1, SP_16_2	~ 50 cy	Metals, VOCs, PAHs, TPH	Yes	Not acceptable for placement inside the Building 2 area	Acceptable for reuse in Parcel C with the exception of the Building 2 area. In these acceptable areas of Parcel C, addition of VOC and PAH concentrations result in health risk below target risk levels, and detected VOCs do not pose a threat to groundwater quality at levels greater than MCLs.

cy = cubic yards

Figures

BOE-C6-0233058

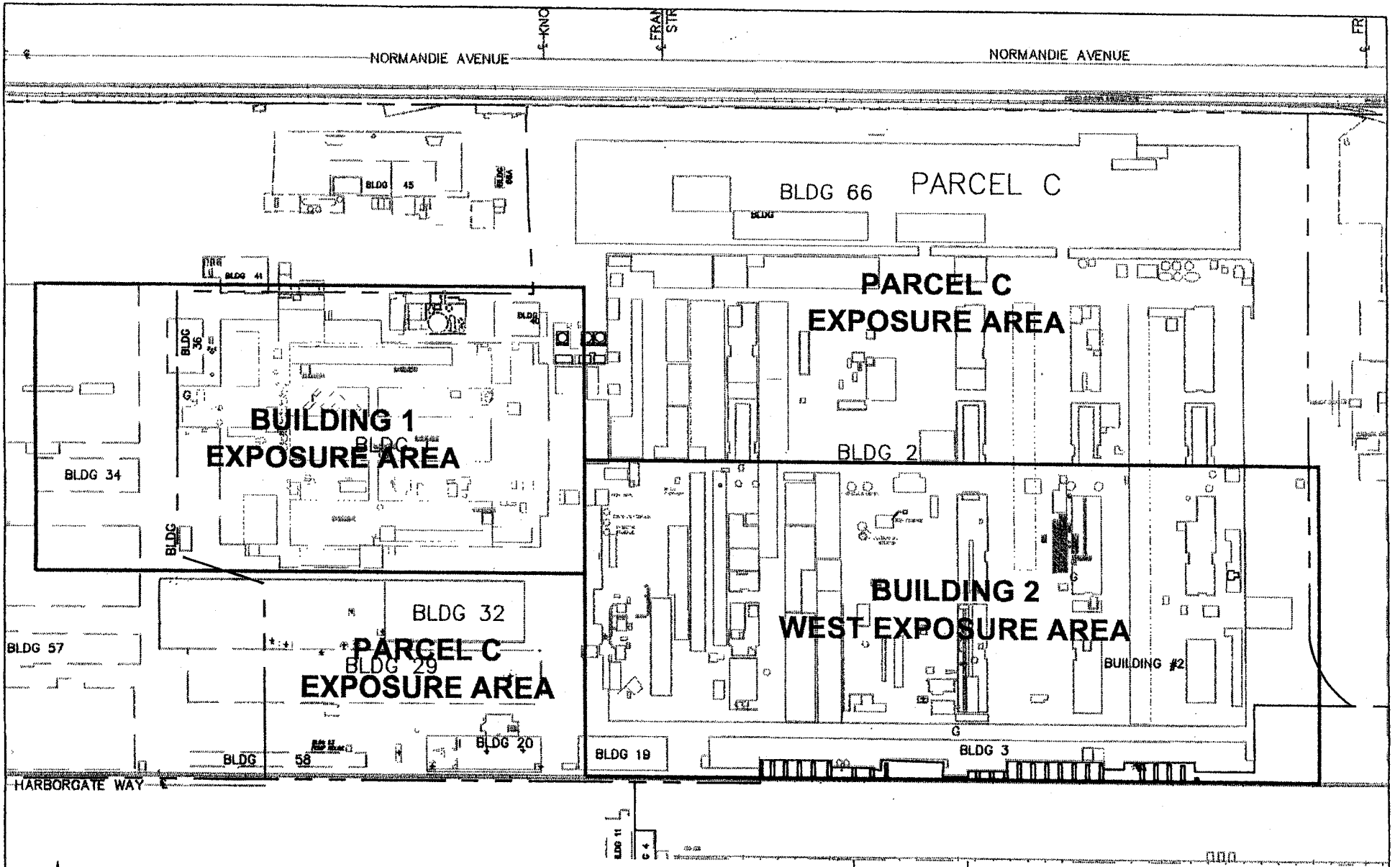
FORMER C-6 FACILITY
SOIL STOCKPILE RE-USE PROTOCOL



ENGLAND GEOSYSTEM
ENVIRONMENTAL ENGINEERING

FIGURE 1

HALEY & ALDRICH



FORMER BOEING C-6 FACILITY
LOS ANGELES, CALIFORNIA

HALEY & ALDRICH
UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

PARCEL C
EXPOSURE AREAS

FIGURE 2

18 JULY, 2001

BOE-C6-0233060

Appendix A

BOE-C6-0233061

APPENDIX A

LABORATORY REPORTS

SEVERN
TRENT
SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

August 16, 2001

STL LOT NUMBER: E1H090329
NELAC Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the 35 samples received under chain of custody by STL Los Angeles on August 9, 2001. These samples are associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report. The PAHs by 8310 analysis was performed by Del Mar Analytical. See attached report for any related anomaly.

STL Los Angeles certifies that the tests performed at our facility meet all the requirements of NELAC. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,

Diane Suzuki
Project Manager
CC: Project File

000117

This report contains _____ pages.

STL Los Angeles is a part of Severn Trent Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

BOE-C6-0233063

SEVERN TRENT SERVICES

LOT NUMBER E1H090329

Nonconformance 05-02087
Affected Samples:
E1H090329 (6): SP_15_4_080901

Affected Methods:
8015B

Case Narrative:
The opening and closing RT marker %D are out low for C36-C39 and for C40+. The average is 12.17%D for the opening and 12.59%D for the closing. There was not impact on the data. The results are reported as measured.

ACCREDITED IN ACCORDANCE WITH nelac

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 8/9/01	Chain of Custody Number: 054132
Address: 9040 FRIARS RD SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210 FAX 619-280-9415	Lab Number: EH090329	Page ____ of ____
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: TRAVIS HAMMOND; Lab Contact:		
Project Name and Location (State): BOEING C6 - TORRANCE, CA	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 27285-001			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: ARSENIC	TPH	METALS	SVOCS	PAH	VOCS	Special Instructions/ Conditions of Receipt
PD-56-1'		9 AM				X	X						X						
PD-56-3'		↓				↓	↓						X						
PD-57-1'		↓				↓	↓						X						
PD-57-3'		↓				↓	↓						X						
SP-15-3-080901	8/9/01	10 AM				↓	↓							X	X	X	X	X	
SP-15-4-080901	8/9/01	↓				↓	↓							X	X	X	X	X	
BLDG-66-66-9-6	8/9/01	↓				↓	↓						X						
PD-79-1'	↓	11 AM				↓	↓						X						
PD-79-3'	↓	↓				↓	↓						X						
PD-78-1'	↓	↓				↓	↓						X						
PD-78-3'	↓	↓				↓	↓						X						
						↓	↓												

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify):

1. Relinquished By: TRAVIS HAMMOND	Date: 8/9/01	Time: 100	1. Received By: [signature]	Date: 8-9-01	Time: 1330
2. Relinquished By: [signature]	Date: 8-9-01	Time: 1500	2. Received By: [signature] - STL	Date: 08/09/01	Time: 1500
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

BOE-C6-0233065

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 8/9/01	Chain of Custody Number: 054134
Address: 9040 FRIARS RD SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210 FAX 619-280-9415	Lab Number: EIH090329	Page ____ of ____
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact:	Lab Contact:	
Project Name and Location (State): C6 - TORRANCE, CA	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 27285-001			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): ARSENIC	Special Instructions/ Conditions of Receipt
PD-72-1'	8/9/01	11AM				X	X						X	
PD-72-3'	↓	↓				↓	↓						↓	
PD-82-1'	↓	↓				↓	↓						↓	
PD-82-3'	↓	↓				↓	↓						↓	
PD-81-1'	↓	↓				↓	↓						↓	
PD-81-3'	↓	↓				↓	↓						↓	
PD-80-1'	↓	↓				↓	↓						↓	
PD-80-3'	↓	↓				↓	↓						↓	
PD-64-1'	↓	↓				↓	↓						↓	
PD-64-3'	↓	↓				↓	↓						↓	
PD-70-1'	↓	↓				↓	↓						↓	
PD-70-3'	↓	↓				↓	↓						↓	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify):

1. Relinquished By: BH - TRAVIS HAMMOND	Date: 8/9/01	Time: 1:00	1. Received By: [signature]	Date: 8-9-01	Time: 1330
2. Relinquished By: [signature]	Date: 8-9-01	Time: 1500	2. Received By: [signature] - SRL	Date: 08/09/01	Time: 1500
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments:

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

000004

BOE-C6-0233066

Chain of Custody Record

STL-4124 (0700)

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 8/9/01	Chain of Custody Number: 054133
Address: 9040 FRIARS RD SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210 FAX 619-280-9415	Lab Number: CH090329	Page ____ of ____
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact:	Lab Contact:	
Project Name and Location (State): BOEING C6 - TORRANCE, CA	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 27285-001			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): ARSENIC	Special Instructions/ Conditions of Receipt
PD-77-1'	8/9/01	11 AM				X		X						X	
PD-77-3'	↓	↓				↓		↓						↓	
PD-71-1'															
PD-71-3'															
PD-76-1'															
PD-76-3'															
PD-75-1'															
PD-75-3'															
PD-74-1'															
PD-74-3'															
PD [redacted]-73-1'															
PD-73-3'	↓	↓				↓		↓						↓	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify):

1. Relinquished By: TSH - TRAVIS HAMMOND	Date: 8/9/01	Time: 1:00	1. Received By: [signature]	Date: 8-9-01	Time: 1330
2. Relinquished By: [signature]	Date: 8-9-01	Time: 1520	2. Received By: [signature] - STL	Date: 08/09/01	Time: 1500
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

BOE-C6-0233067

STL LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 8-9-01

Quantims Lot #: E1H090329
Client Name: Haley Aldrich C6
Received by:
Delivered by : ☐Client ☐Airborne ☐Fed Ex ☐DHL ☐Ultra-Ex ☐Rey B. ☐UPS ☐DES ☒Other Mike

Quote #: 42295
Project: BRC C-6
Date/Time Received: 8/9/01 15:00

	Initial / Date
Custody Seal Status: ☐Intact ☐Broken ☒None	AR 8/9/01
Custody Seal #(s): ☒No Seal #	
Sample Container(s): ☐STL-LA ☒Client ☐N/A	
Temperature(s) (COOLER/BLANK) in °C: 5.0 (CORRECTED TEMP) 5.2	
Thermometer Used : ☒IR (Infra-red) ☐Digital (Probe)	
Samples: ☒Intact ☐Broken ☐Other	
Anomalies: ☒No ☐Yes (See Clouseau)	
Labeled by	
Labeling checked by	

Turn Around Time: ☐RUSH-24HR ☒RUSH-48HR ☐RUSH-72HR ☐NORMAL
Short-Hold Notification: ☐Ph ☐Wet Chem ☐Metals (Filter/Pres) ☒Encore ☐N/A
Outside Analysis(es) (Test/Lab/Date Sent Out) :
DelMar - Colton

********** LEAVE NO BLANK SPACES ; USE N/A **********

Fraction	1-9 35										PH
VOAh /*											N/A
Sleeve	1										—

k:HCl sx:Sodium Hydroxide zmx:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f2:HNO3-Lab filtered
CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA

* Number of VOA's w/ Headspace present

LOGGED BY/DATE: AB 08/09/01 REVIEWED BY/DATE: [illegible] 8/9/01

HALEY & ALDRICH INC

Client Sample ID: SP_15_3_080901

GC Semivolatiles

Lot-Sample #...:	E1H090329-005	Work Order #...:	EHQTX1AA	Matrix.....:	SOLID
Date Sampled...:	08/09/01 10:00	Date Received..:	08/09/01 15:00	MS Run #.....:	1222096
Prep Date.....:	08/10/01	Analysis Date..:	08/10/01		
Prep Batch #...:	1222223	Analysis Time..:	16:39		
Dilution Factor:	2				
Analyst ID.....:	356074	Instrument ID..:	G02		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C8-C9	ND	20	mg/kg	10
C10-C11	27	20	mg/kg	10
C12-C13	280	20	mg/kg	10
C14-C15	480	20	mg/kg	10
C16-C17	380	20	mg/kg	10
C18-C19	240	20	mg/kg	10
C20-C23	88	20	mg/kg	10
C24-C27	66	20	mg/kg	10
C28-C31	78	20	mg/kg	10
C32-C35	91	20	mg/kg	10
C36-C39	100	20	mg/kg	10
C40+	93	20	mg/kg	10
Total Carbon Chain Range	1900	20	mg/kg	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	113	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP_15_3_080901

GC Volatiles

Lot-Sample #...:	E1H090329-005	**Work Order #...:**	EHQTX1C7	**Matrix.....:**	SOLID
Date Sampled...:	08/09/01 10:00	**Date Received..:**	08/09/01 15:00	**MS Run #.....:**	1222112
Prep Date.....:	08/09/01	**Analysis Date..:**	08/10/01		
Prep Batch #...:	1222237	**Analysis Time..:**	00:34		
Dilution Factor:	1				
Analyst ID.....:	001464	**Instrument ID..:**	G15		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	84	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP_15_3_080901

GC/MS Volatiles

Lot-Sample #...: E1H090329-005 Work Order #...: EHQTX1AC Matrix.....: SOLID
Date Sampled...: 08/09/01 10:00 Date Received..: 08/09/01 15:00 MS Run #.....: 1222142
Prep Date.....: 08/09/01 Analysis Date..: 08/09/01
Prep Batch #...: 1222277 Analysis Time..: 21:37
Dilution Factor: 1
Analyst ID.....: 999998 Instrument ID..: MSG
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

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HALEY & ALDRICH INC

Client Sample ID: SP_15_3_080901

GC/MS Volatiles

Lot-Sample #...: E1H090329-005 **Work Order #...:** EHQTX1AC **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	**6.2**	**5.0**	**ug/kg**	**2.0**
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	**18**	**5.0**	**ug/kg**	**2.0**
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	**52**	**5.0**	**ug/kg**	**2.0**
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	115	(70 - 130)
1,2-Dichloroethane-d4	74	(60 - 140)
Toluene-d8	87	(70 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP_15_3_080901

GC/MS Semivolatiles

Lot-Sample #...: E1H090329-005 Work Order #...: EHQTX1AD Matrix.....: SOLID
Date Sampled...: 08/09/01 10:00 Date Received..: 08/09/01 15:00 MS Run #.....: 1222102
Prep Date.....: 08/10/01 Analysis Date..: 08/13/01
Prep Batch #...: 1222224 Analysis Time..: 21:24
Dilution Factor: 5
Analyst ID.....: 010060 Instrument ID..: MSI
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	1600	ug/kg	500
Acenaphthylene	ND	1600	ug/kg	500
Anthracene	**1200 J**	**1600**	**ug/kg**	**400**
Benzo(a)anthracene	ND	1600	ug/kg	500
Benzo(b)fluoranthene	ND	1600	ug/kg	500
Benzo(k)fluoranthene	ND	1600	ug/kg	1000
Benzo(ghi)perylene	ND	1600	ug/kg	750
Benzo(a)pyrene	ND	1600	ug/kg	350
Benzoic acid	ND	8000	ug/kg	2500
Benzyl alcohol	ND	1600	ug/kg	500
bis(2-Chloroethoxy) methane	ND	1600	ug/kg	500
bis(2-Chloroethyl)-ether	ND	1600	ug/kg	500
bis(2-Chloroisopropyl) ether	ND	1600	ug/kg	550
bis(2-Ethylhexyl) phthalate	ND	1600	ug/kg	1000
4-Bromophenyl phenyl ether	ND	1600	ug/kg	400
Butyl benzyl phthalate	ND	1600	ug/kg	500
Carbazole	ND	1600	ug/kg	400
4-Chloroaniline	ND	1600	ug/kg	750
4-Chloro-3-methylphenol	ND	1600	ug/kg	500
2-Chloronaphthalene	ND	1600	ug/kg	500
2-Chlorophenol	ND	1600	ug/kg	750
4-Chlorophenyl phenyl ether	ND	1600	ug/kg	450
Chrysene	ND	1600	ug/kg	500
Dibenz(a,h)anthracene	ND	1600	ug/kg	500
Dibenzofuran	ND	1600	ug/kg	450
Di-n-butyl phthalate	ND	1600	ug/kg	500
1,2-Dichlorobenzene	ND	1600	ug/kg	650
1,3-Dichlorobenzene	ND	1600	ug/kg	650
1,4-Dichlorobenzene	ND	1600	ug/kg	650
3,3'-Dichlorobenzidine	ND	8000	ug/kg	2000
2,4-Dichlorophenol	ND	1600	ug/kg	450

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HALEY & ALDRICH INC

Client Sample ID: SP_15_3_080901

GC/MS Semivolatiles

Lot-Sample #...: E1H090329-005 Work Order #...: EHQTX1AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	1600	ug/kg	500
2,4-Dimethylphenol	ND	1600	ug/kg	500
Dimethyl phthalate	ND	1600	ug/kg	400
4,6-Dinitro-2-methylphenol	ND	8000	ug/kg	1200
2,4-Dinitrophenol	ND	8000	ug/kg	2500
2,4-Dinitrotoluene	ND	1600	ug/kg	500
2,6-Dinitrotoluene	ND	1600	ug/kg	450
Di-n-octyl phthalate	ND	1600	ug/kg	550
Fluoranthene	ND	1600	ug/kg	350
Fluorene	**2400**	**1600**	**ug/kg**	**450**
Hexachlorobenzene	ND	1600	ug/kg	400
Hexachlorobutadiene	ND	1600	ug/kg	500
Hexachlorocyclopentadiene	ND	8000	ug/kg	1600
Hexachloroethane	ND	1600	ug/kg	600
Indeno(1,2,3-cd)pyrene	ND	1600	ug/kg	500
Isophorone	ND	1600	ug/kg	500
2-Methylnaphthalene	**12000**	**1600**	**ug/kg**	**450**
2-Methylphenol	ND	1600	ug/kg	400
3-Methylphenol & 4-Methylphenol	ND	1600	ug/kg	500
Naphthalene	**610 J**	**1600**	**ug/kg**	**450**
2-Nitroaniline	ND	8000	ug/kg	1500
3-Nitroaniline	ND	8000	ug/kg	1800
4-Nitroaniline	ND	8000	ug/kg	1000
Nitrobenzene	ND	1600	ug/kg	750
2-Nitrophenol	ND	1600	ug/kg	500
4-Nitrophenol	ND	8000	ug/kg	1500
N-Nitrosodiphenylamine	ND	1600	ug/kg	400
N-Nitrosodi-n-propylamine	ND	1600	ug/kg	450
Pentachlorophenol	ND	8000	ug/kg	1200
Phenanthrene	**6900**	**1600**	**ug/kg**	**400**
Phenol	ND	1600	ug/kg	500
Pyrene	**890 J**	**1600**	**ug/kg**	**600**
1,2,4-Trichlorobenzene	ND	1600	ug/kg	500
2,4,5-Trichlorophenol	ND	1600	ug/kg	500
2,4,6-Trichlorophenol	ND	1600	ug/kg	350

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HALEY & ALDRICH INC

Client Sample ID: SP_15_3_080901

GC/MS Semivolatiles

Lot-Sample #...: E1H090329-005 Work Order #...: EHQTX1AD Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	97	(40 - 130)
2-Fluorophenol	91	(50 - 115)
2,4,6-Tribromophenol	98	(30 - 115)
Nitrobenzene-d5	75	(45 - 115)
Phenol-d5	101	(50 - 120)
Terphenyl-d14	117	(50 - 140)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_15_4_080901

GC Semivolatiles

Lot-Sample #...:	E1H090329-006	Work Order #...:	EHQVF1AD	Matrix.....:	SOLID
Date Sampled...:	08/09/01 10:00	Date Received..:	08/09/01 15:00	MS Run #.....:	1222096
Prep Date.....:	08/10/01	Analysis Date..:	08/13/01		
Prep Batch #...:	1222223	Analysis Time..:	10:17		
Dilution Factor:	5				
Analyst ID.....:	356074	Instrument ID..:	G02		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C8-C9	ND	50	mg/kg	25
C10-C11	40 J	50	mg/kg	25
C12-C13	400	50	mg/kg	25
C14-C15	650	50	mg/kg	25
C16-C17	460	50	mg/kg	25
C18-C19	260	50	mg/kg	25
C20-C23	92	50	mg/kg	25
C24-C27	61	50	mg/kg	25
C28-C31	71	50	mg/kg	25
C32-C35	77	50	mg/kg	25
C36-C39	76	50	mg/kg	25
C40+	38 J	50	mg/kg	25
Total Carbon Chain Range	2200	50	mg/kg	25

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	116	(60 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_15_4_080901

GC Volatiles

Lot-Sample #...:	E1H090329-006	**Work Order #...:**	EHQVF1A3	**Matrix.....:**	SOLID
Date Sampled...:	08/09/01 10:00	**Date Received..:**	08/09/01 15:00	**MS Run #.....:**	1222112
Prep Date.....:	08/09/01	**Analysis Date..:**	08/10/01		
Prep Batch #...:	1222237	**Analysis Time..:**	01:00		
Dilution Factor:	1				
Analyst ID.....:	001464	**Instrument ID..:**	G15		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	88	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP_15_4_080901

GC/MS Volatiles

Lot-Sample #...:	E1H090329-006	**Work Order #...:**	EHQVF1AE	**Matrix.....:**	SOLID
Date Sampled...:	08/09/01 10:00	**Date Received..:**	08/09/01 15:00	**MS Run #.....:**	1222142
Prep Date.....:	08/09/01	**Analysis Date..:**	08/09/01		
Prep Batch #...:	1222277	**Analysis Time..:**	22:11		
Dilution Factor:	1				
Analyst ID.....:	999998	**Instrument ID..:**	MSG		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

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HALEY & ALDRICH INC

Client Sample ID: SP_15_4_080901

GC/MS Volatiles

Lot-Sample #...: E1H090329-006 Work Order #...: EHQVF1AE Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	**3.7 J**	**5.0**	**ug/kg**	**2.0**
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	**9.1**	**5.0**	**ug/kg**	**2.0**
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	**10**	**5.0**	**ug/kg**	**2.0**
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	117	(70 - 130)
1,2-Dichloroethane-d4	78	(60 - 140)
Toluene-d8	93	(70 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_15_4_080901

GC/MS Semivolatiles

Lot-Sample #...:	E1H090329-006	**Work Order #...:**	EHQVF1AF	**Matrix.....:**	SOLID
Date Sampled...:	08/09/01 10:00	**Date Received..:**	08/09/01 15:00	**MS Run #.....:**	1222102
Prep Date.....:	08/10/01	**Analysis Date..:**	08/14/01		
Prep Batch #...:	1222224	**Analysis Time..:**	13:52		
Dilution Factor:	10				
Analyst ID.....:	010060	**Instrument ID..:**	MSI		
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	3300	ug/kg	1000
Acenaphthylene	ND	3300	ug/kg	1000
Anthracene	**1600 J**	**3300**	**ug/kg**	**800**
Benzo(a)anthracene	ND	3300	ug/kg	1000
Benzo(b)fluoranthene	ND	3300	ug/kg	1000
Benzo(k)fluoranthene	ND	3300	ug/kg	2000
Benzo(ghi)perylene	ND	3300	ug/kg	1500
Benzo(a)pyrene	ND	3300	ug/kg	700
Benzoic acid	ND	16000	ug/kg	5000
Benzyl alcohol	ND	3300	ug/kg	1000
bis(2-Chloroethoxy) methane	ND	3300	ug/kg	1000
bis(2-Chloroethyl)-ether	ND	3300	ug/kg	1000
bis(2-Chloroisopropyl) ether	ND	3300	ug/kg	1100
bis(2-Ethylhexyl) phthalate	ND	3300	ug/kg	2000
4-Bromophenyl phenyl ether	ND	3300	ug/kg	800
Butyl benzyl phthalate	ND	3300	ug/kg	1000
Carbazole	ND	3300	ug/kg	800
4-Chloroaniline	ND	3300	ug/kg	1500
4-Chloro-3-methylphenol	ND	3300	ug/kg	1000
2-Chloronaphthalene	ND	3300	ug/kg	1000
2-Chlorophenol	ND	3300	ug/kg	1500
4-Chlorophenyl phenyl ether	ND	3300	ug/kg	900
Chrysene	ND	3300	ug/kg	1000
Dibenz(a,h)anthracene	ND	3300	ug/kg	1000
Dibenzofuran	ND	3300	ug/kg	900
Di-n-butyl phthalate	ND	3300	ug/kg	1000
1,2-Dichlorobenzene	ND	3300	ug/kg	1300
1,3-Dichlorobenzene	ND	3300	ug/kg	1300
1,4-Dichlorobenzene	ND	3300	ug/kg	1300
3,3'-Dichlorobenzidine	ND	16000	ug/kg	4000
2,4-Dichlorophenol	ND	3300	ug/kg	900

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HALEY & ALDRICH INC

Client Sample ID: SP_15_4_080901

GC/MS Semivolatiles

Lot-Sample #...: E1H090329-006 Work Order #...: EHQVF1AF Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	3300	ug/kg	1000
2,4-Dimethylphenol	ND	3300	ug/kg	1000
Dimethyl phthalate	ND	3300	ug/kg	800
4,6-Dinitro-2-methylphenol	ND	16000	ug/kg	2500
2,4-Dinitrophenol	ND	16000	ug/kg	5000
2,4-Dinitrotoluene	ND	3300	ug/kg	1000
2,6-Dinitrotoluene	ND	3300	ug/kg	900
Di-n-octyl phthalate	ND	3300	ug/kg	1100
Fluoranthene	ND	3300	ug/kg	700
Fluorene	**2800 J**	**3300**	**ug/kg**	**900**
Hexachlorobenzene	ND	3300	ug/kg	800
Hexachlorobutadiene	ND	3300	ug/kg	1000
Hexachlorocyclopentadiene	ND	16000	ug/kg	3200
Hexachloroethane	ND	3300	ug/kg	1200
Indeno(1,2,3-cd)pyrene	ND	3300	ug/kg	1000
Isophorone	ND	3300	ug/kg	1000
2-Methylnaphthalene	**20000**	**3300**	**ug/kg**	**900**
2-Methylphenol	ND	3300	ug/kg	800
3-Methylphenol & 4-Methylphenol	ND	3300	ug/kg	1000
Naphthalene	**1600 J**	**3300**	**ug/kg**	**900**
2-Nitroaniline	ND	16000	ug/kg	3000
3-Nitroaniline	ND	16000	ug/kg	3500
4-Nitroaniline	ND	16000	ug/kg	2000
Nitrobenzene	ND	3300	ug/kg	1500
2-Nitrophenol	ND	3300	ug/kg	1000
4-Nitrophenol	ND	16000	ug/kg	3000
N-Nitrosodiphenylamine	ND	3300	ug/kg	800
N-Nitrosodi-n-propylamine	ND	3300	ug/kg	900
Pentachlorophenol	ND	16000	ug/kg	2500
Phenanthrene	**8900**	**3300**	**ug/kg**	**800**
Phenol	ND	3300	ug/kg	1000
Pyrene	**1500 J**	**3300**	**ug/kg**	**1200**
1,2,4-Trichlorobenzene	ND	3300	ug/kg	1000
2,4,5-Trichlorophenol	ND	3300	ug/kg	1000
2,4,6-Trichlorophenol	ND	3300	ug/kg	700

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HALEY & ALDRICH INC

Client Sample ID: SP_15_4_080901

GC/MS Semivolatiles

Lot-Sample #...: E1H090329-006 Work Order #...: EHQVF1AF Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	0.0 SRD,NC	(40 - 130)
2-Fluorophenol	0.0 SRD,NC	(50 - 115)
2,4,6-Tribromophenol	0.0 SRD,NC	(30 - 115)
Nitrobenzene-d5	0.0 SRD,NC	(45 - 115)
Phenol-d5	0.0 SRD,NC	(50 - 120)
Terphenyl-d14	0.0 SRD,NC	(50 - 140)

NOTE(S):

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

NC The recovery and/or RPD were not calculated.

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

SP_15_3_080901

GC/MS Semivolatiles

Lot-Sample #: E1H090329-005 **Work Order #:** EHQTX1AD **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Pyridine		ND	M		ug/kg
2-Naphthylamine		ND	M		ug/kg
Pentachloroethane		ND	M		ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

HALEY & ALDRICH INC

SP_15_4_080901

GC/MS Semivolatiles

Lot-Sample #: E1H090329-006 **Work Order #:** EHQVF1AF **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Pyridine		ND	M		ug/kg
2-Naphthylamine		ND	M		ug/kg
Pentachloroethane		ND	M		ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

HALEY & ALDRICH INC

Method Blank Report

GC/MS Semivolatiles

Lot-Sample #: E1H100000-224 B **Work Order #:** EHRL41AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Pyridine		ND	M		ug/kg
2-Naphthylamine		ND	M		ug/kg
Pentachloroethane		ND	M		ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

HALEY & ALDRICH INC

Client Sample ID: SP_15_3_080901

TOTAL Metals

Lot-Sample #...: E1H090329-005 Matrix.....: SOLID
Date Sampled...: 08/09/01 10:00 Date Received..: 08/09/01 15:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1221469						
Aluminum	30000	20.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AE
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 8.0	
Antimony	0.78 B	6.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AG
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.60	
Barium	178	2.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AH
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.10	
Cadmium	0.51	0.50	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AJ
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.060	
Chromium	32.7	1.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AK
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.10	
Beryllium	0.88	0.50	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AL
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.050	
Lead	7.3	0.50	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AM
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.30	
Selenium	0.81	0.50	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AN
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AP
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.10	
Cobalt	11.2	5.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AQ
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.10	

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HALEY & ALDRICH INC

Client Sample ID: SP_15_3_080901

TOTAL Metals

Lot-Sample #...: E1H090329-005 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	**21.1**	**2.5**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQTX1AR**
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.40	
Molybdenum	ND	4.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AT
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.30	
Nickel	**21.1**	**4.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQTX1AU**
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQTX1AV
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.80	
Vanadium	**56.3**	**5.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQTX1AW**
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.10	
Zinc	**54.5**	**2.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQTX1AX**
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 1.0	
Arsenic	**3.7**	**1.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQTX1AF**
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.40	

Prep Batch #...: 1222344

Mercury	ND	0.10	mg/kg	SW846 7471A	08/10-08/13/01	EHQTX1A0
		Dilution Factor: 1		Analysis Time..: 15:21	Analyst ID.....: 0210884	
		Instrument ID..: M04		MS Run #.....: 1222182	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_15_4_080901

TOTAL Metals

Lot-Sample #...: E1H090329-006 Matrix.....: SOLID
Date Sampled...: 08/09/01 10:00 Date Received..: 08/09/01 15:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1221469						
Aluminum	**16400**	**20.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1AG**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 8.0	
Antimony	ND	6.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQVF1AJ
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.60	
Barium	**102**	**2.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1AK**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.10	
Cadmium	**0.37 B**	**0.50**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1AL**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.060	
Chromium	**19.5**	**1.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1AM**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.10	
Beryllium	**0.53**	**0.50**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1AN**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.050	
Lead	**14.4**	**0.50**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1AP**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.30	
Selenium	**0.84**	**0.50**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1AQ**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQVF1AR
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.10	
Cobalt	**10.1**	**5.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1AT**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.10	

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HALEY & ALDRICH INC

Client Sample ID: SP_15_4_080901

TOTAL Metals

Lot-Sample #...: E1H090329-006 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	**17.7**	**2.5**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1AU**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.40	
Molybdenum	ND	4.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQVF1AV
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.30	
Nickel	**13.4**	**4.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1AW**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQVF1AX
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.80	
Vanadium	**40.6**	**5.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1A0**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.10	
Zinc	**39.4**	**2.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1A1**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 1.0	
Arsenic	**2.4**	**1.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQVF1AH**
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 0210884	
		Instrument ID..: M01		MS Run #.....: 1221244	MDL.....: 0.40	
Prep Batch #...: 1222344						
Mercury	**0.089 B**	**0.10**	**mg/kg**	**SW846 7471A**	**08/10-08/13/01**	**EHQVF1AA**
		Dilution Factor: 1		Analysis Time..: 15:27	Analyst ID.....: 0210884	
		Instrument ID..: M04		MS Run #.....: 1222182	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

QC DATA ASSOCIATION SUMMARY

E1H090329

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 6010B		1221469	1221244
002	SOLID	SW846 6010B		1221469	1221244
003	SOLID	SW846 6010B		1221469	1221244
004	SOLID	SW846 6010B		1221469	1221244
005	SOLID	SW846 8015B		1222223	1222096
	SOLID	SW846 8015B		1222237	1222112
	SOLID	SW846 7471A		1222344	1222182
	SOLID	SW846 8260B		1222277	1222142
	SOLID	SW846 8270C		1222224	1222102
	SOLID	SW846 6010B		1221469	1221244
006	SOLID	SW846 8015B		1222223	1222096
	SOLID	SW846 8015B		1222237	1222112
	SOLID	SW846 7471A		1222344	1222182
	SOLID	SW846 8260B		1222277	1222142
	SOLID	SW846 8270C		1222224	1222102
	SOLID	SW846 6010B		1221469	1221244
007	SOLID	SW846 6010B		1221469	1221244
008	SOLID	SW846 6010B		1221469	1221244
009	SOLID	SW846 6010B		1221469	1221244
010	SOLID	SW846 6010B		1221469	1221244
011	SOLID	SW846 6010B		1221469	1221244
012	SOLID	SW846 6010B		1221469	1221244
013	SOLID	SW846 6010B		1221469	1221244
014	SOLID	SW846 6010B		1221469	1221244
015	SOLID	SW846 6010B		1221469	1221244
016	SOLID	SW846 6010B		1221469	1221244

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QC DATA ASSOCIATION SUMMARY

E1H090329

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
017	SOLID	SW846 6010B		1221469	1221244
018	SOLID	SW846 6010B		1221469	1221244
019	SOLID	SW846 6010B		1221469	1221244
020	SOLID	SW846 6010B		1221469	1221244
021	SOLID	SW846 6010B		1221475	1221247
022	SOLID	SW846 6010B		1221475	1221247
023	SOLID	SW846 6010B		1221475	1221247
024	SOLID	SW846 6010B		1221475	1221247
025	SOLID	SW846 6010B		1221475	1221247
026	SOLID	SW846 6010B		1221475	1221247
027	SOLID	SW846 6010B		1221475	1221247
028	SOLID	SW846 6010B		1221475	1221247
029	SOLID	SW846 6010B		1221475	1221247
030	SOLID	SW846 6010B		1221475	1221247
031	SOLID	SW846 6010B		1221475	1221247
032	SOLID	SW846 6010B		1221475	1221247
033	SOLID	SW846 6010B		1221475	1221247
034	SOLID	SW846 6010B		1221475	1221247
035	SOLID	SW846 6010B		1221475	1221247

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E1H090329
MB Lot-Sample #: E1H100000-223
Work Order #...: EHRLJ1AA
Matrix.....: SOLID
Prep Date.....: 08/10/01
Analysis Time..: 14:42
Analysis Date..: 08/10/01
Prep Batch #...: 1222223
Instrument ID..: G02
Dilution Factor: 1
Analyst ID.....: 356074

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
C8-C9	ND	10	mg/kg	SW846 8015B
C10-C11	ND	10	mg/kg	SW846 8015B
C12-C13	ND	10	mg/kg	SW846 8015B
C14-C15	ND	10	mg/kg	SW846 8015B
C16-C17	ND	10	mg/kg	SW846 8015B
C18-C19	ND	10	mg/kg	SW846 8015B
C20-C23	ND	10	mg/kg	SW846 8015B
C24-C27	ND	10	mg/kg	SW846 8015B
C28-C31	ND	10	mg/kg	SW846 8015B
C32-C35	ND	10	mg/kg	SW846 8015B
C36-C39	ND	10	mg/kg	SW846 8015B
C40+	ND	10	mg/kg	SW846 8015B
Total Carbon Chain Range	ND	10	mg/kg	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	93	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: E1H090329 **Work Order #...:** EHRL41AA **Matrix.....:** SOLID
MB Lot-Sample #: E1H100000-224

Prep Date.....: 08/10/01 **Analysis Time..:** 12:12
Analysis Date..: 08/13/01 **Prep Batch #...:** 1222224 **Instrument ID..:** MSI
Dilution Factor: 1

Analyst ID.....: 010060

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Benzoic acid	ND	1600	ug/kg	SW846 8270C
Benzyl alcohol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)-ether	ND	330	ug/kg	SW846 8270C
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
Carbazole	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	330	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: E1H090329 **Work Order #...:** EHRL41AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopentadiene	ND	1600	ug/kg	SW846 8270C
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propylamine	ND	330	ug/kg	SW846 8270C
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Phenol	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
1,2,4-Trichlorobenzene	ND	330	ug/kg	SW846 8270C
2,4,5-Trichlorophenol	ND	330	ug/kg	SW846 8270C
2,4,6-Trichlorophenol	ND	330	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	75	(40 - 130)
2-Fluorophenol	78	(50 - 115)
2,4,6-Tribromophenol	105	(30 - 115)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: E1H090329 **Work Order #...:** EHRL41AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitrobenzene-d5	67	(45 - 115)		
Phenol-d5	76	(50 - 120)		
Terphenyl-d14	96	(50 - 140)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E1H090329
MB Lot-Sample #: E1H100000-237

Analysis Date..: 08/09/01
Dilution Factor: 1

Work Order #...: EHRN01AA

Prep Date.....: 08/09/01
Prep Batch #...: 1222237

Analyst ID.....: 001464

Matrix.....: SOLID

Analysis Time..: 17:29
Instrument ID..: G15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
C6-C8	ND	1.0	mg/kg	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	82	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1H090329 **Work Order #...:** EHR441AA **Matrix.....:** SOLID
MB Lot-Sample #: E1H100000-277

Prep Date.....: 08/09/01 **Analysis Time..:** 20:53
Analysis Date..: 08/09/01 **Prep Batch #...:** 1222277 **Instrument ID..:** MSG
Dilution Factor: 1

Analyst ID.....: 999998

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1H090329 **Work Order #...:** EHR441AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	112	(70 - 130)
1,2-Dichloroethane-d4	73	(60 - 140)
Toluene-d8	86	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E1H090000-469 **Prep Batch #...:** 1221469						
Aluminum	ND	20.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AA
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AD
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	ND	2.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AE
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	**0.10 B**	**0.50**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQXL1AF**
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	**0.26 B**	**1.0**	**mg/kg**	**SW846 6010B**	**08/09-08/10/01**	**EHQXL1AG**
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	ND	0.50	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AH
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	ND	0.50	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AJ
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AK
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AL
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AM
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Copper	ND	2.5	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AN
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Molybdenum	ND	4.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AP
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AQ
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AR
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AT
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AU
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXL1AC
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 021088	Instrument ID..: M01	

MB Lot-Sample #: E1H090000-475 **Prep Batch #...:** 1221475

Arsenic	ND	1.0	mg/kg	SW846 6010B	08/09-08/10/01	EHQXX1AA
		Dilution Factor: 1				
		Analysis Time..: 17:00		Analyst ID.....: 021088	Instrument ID..: M01	

MB Lot-Sample #: E1H100000-344 **Prep Batch #...:** 1222344

Mercury	ND	0.10	mg/kg	SW846 7471A	08/10-08/13/01	EHTJ71AA
		Dilution Factor: 1				
		Analysis Time..: 15:18		Analyst ID.....: 021088	Instrument ID..: M04	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E1H090329 **Work Order #...:** EHRLJ1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H100000-223
Prep Date.....: 08/10/01 **Analysis Date..:** 08/10/01
Prep Batch #...: 1222223 **Analysis Time..:** 15:21
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Diesel)	**250**	**224**	**mg/kg**	**90**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	107	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: E1H090329 **Work Order #...:** EHRL41AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H100000-224
Prep Date.....: 08/10/01 **Analysis Date..:** 08/13/01
Prep Batch #...: 1222224 **Analysis Time..:** 13:14
Dilution Factor: 1 **Instrument ID..:** MSI
Analyst ID.....: 010060

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Acenaphthene	**3330**	**2470**	**ug/kg**	**74**	**SW846 8270C**
4-Chloro-3-methylphenol	**5000**	**3950**	**ug/kg**	**79**	**SW846 8270C**
2-Chlorophenol	**5000**	**3660**	**ug/kg**	**73**	**SW846 8270C**
1,4-Dichlorobenzene	**3330**	**2210**	**ug/kg**	**66**	**SW846 8270C**
2,4-Dinitrotoluene	**3330**	**2910**	**ug/kg**	**87**	**SW846 8270C**
4-Nitrophenol	**5000**	**3830**	**ug/kg**	**77**	**SW846 8270C**
N-Nitrosodi-n-propyl-amine	**3330**	**2410**	**ug/kg**	**72**	**SW846 8270C**
Pentachlorophenol	**5000**	**5710**	**ug/kg**	**114**	**SW846 8270C**
Phenol	**5000**	**3170**	**ug/kg**	**63**	**SW846 8270C**
Pyrene	**3330**	**2820**	**ug/kg**	**85**	**SW846 8270C**
1,2,4-Trichloro-benzene	**3330**	**2680**	**ug/kg**	**80**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	75	(40 - 130)
2-Fluorophenol	86	(50 - 115)
2,4,6-Tribromophenol	44	(30 - 115)
Nitrobenzene-d5	69	(45 - 115)
Phenol-d5	79	(50 - 120)
Terphenyl-d14	98	(50 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E1H090329 **Work Order #...:** EHRN01AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H100000-237
Prep Date.....: 08/09/01 **Analysis Date..:** 08/09/01
Prep Batch #...: 1222237 **Analysis Time..:** 16:35
Dilution Factor: 1 **Instrument ID..:** G15
Analyst ID.....: 001464

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Gasoline)	**5.00**	**4.35**	**mg/kg**	**87**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	105	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E1H090329 **Work Order #...:** EHR441AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H100000-277
Prep Date.....: 08/09/01 **Analysis Date..:** 08/09/01
Prep Batch #...: 1222277 **Analysis Time..:** 19:34
Dilution Factor: 1 **Instrument ID..:** MSG
Analyst ID.....: 999998

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	**50.0**	**60.3**	**ug/kg**	**121**	**SW846 8260B**
Benzene	**50.0**	**58.8**	**ug/kg**	**118**	**SW846 8260B**
Trichloroethene	**50.0**	**58.8**	**ug/kg**	**118**	**SW846 8260B**
Toluene	**50.0**	**52.3**	**ug/kg**	**105**	**SW846 8260B**
Chlorobenzene	**50.0**	**53.4**	**ug/kg**	**107**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(70 - 130)
1,2-Dichloroethane-d4	74	(60 - 140)
Toluene-d8	84	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E1H090000-469 **Prep Batch #...:** 1221469							
Aluminum	200	176	mg/kg	88	SW846 6010B	08/09-08/10/01	EHQXL1AV
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	50.0	42.9	mg/kg	86	SW846 6010B	08/09-08/10/01	EHQXL1AX
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	200	204	mg/kg	102	SW846 6010B	08/09-08/10/01	EHQXL1A0
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	5.00	5.23	mg/kg	105	SW846 6010B	08/09-08/10/01	EHQXL1A1
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	20.0	21.8	mg/kg	109	SW846 6010B	08/09-08/10/01	EHQXL1A2
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	5.00	5.29	mg/kg	106	SW846 6010B	08/09-08/10/01	EHQXL1A3
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	50.0	46.1	mg/kg	92	SW846 6010B	08/09-08/10/01	EHQXL1A4
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	200	174	mg/kg	87	SW846 6010B	08/09-08/10/01	EHQXL1A5
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Silver	5.00	4.89	mg/kg	98	SW846 6010B	08/09-08/10/01	EHQXL1A6
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	50.0	52.5	mg/kg	105	SW846 6010B	08/09-08/10/01	EHQXL1A7
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	25.0	25.2	mg/kg	101	SW846 6010B	08/09-08/10/01	EHQXL1A8
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	100	101	mg/kg	101	SW846 6010B	08/09-08/10/01	EHQXL1A9
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	50.0	52.1	mg/kg	104	SW846 6010B	08/09-08/10/01	EHQXL1CA
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	200	181	mg/kg	90	SW846 6010B	08/09-08/10/01	EHQXL1CC
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	50.0	52.5	mg/kg	105	SW846 6010B	08/09-08/10/01	EHQXL1CD
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	50.0	50.7	mg/kg	101	SW846 6010B	08/09-08/10/01	EHQXL1CE
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	200	185	mg/kg	93	SW846 6010B	08/09-08/10/01	EHQXL1AW
			Dilution Factor: 1				
			Analysis Time..: 12:56		Analyst ID.....: 021088	Instrument ID..: M01	

LCS Lot-Sample#: E1H090000-475 **Prep Batch #...:** 1221475

Arsenic	200	175	mg/kg	87	SW846 6010B	08/09-08/10/01	EHQXX1AC
			Dilution Factor: 1				
			Analysis Time..: 17:06		Analyst ID.....: 021088	Instrument ID..: M01	

LCS Lot-Sample#: E1H100000-344 **Prep Batch #...:** 1222344

Mercury	0.833	0.810	mg/kg	97	SW846 7471A	08/10-08/13/01	EHTJ71AC
			Dilution Factor: 1				
			Analysis Time..: 15:19		Analyst ID.....: 021088	Instrument ID..: M04	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E1H090329 **Work Order #...:** EHRLJ1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H100000-223
Prep Date.....: 08/10/01 **Analysis Date..:** 08/10/01
Prep Batch #...: 1222223 **Analysis Time..:** 15:21
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**90**	**(60 - 130)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	107	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: E1H090329 **Work Order #...:** EHRL41AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H100000-224
Prep Date.....: 08/10/01 **Analysis Date..:** 08/13/01
Prep Batch #...: 1222224 **Analysis Time..:** 13:14
Dilution Factor: 1 **Instrument ID..:** MSI
Analyst ID.....: 010060

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**74**	**(50 - 125)**	**SW846 8270C**
4-Chloro-3-methylphenol	**79**	**(50 - 110)**	**SW846 8270C**
2-Chlorophenol	**73**	**(50 - 120)**	**SW846 8270C**
1,4-Dichlorobenzene	**66**	**(40 - 115)**	**SW846 8270C**
2,4-Dinitrotoluene	**87**	**(40 - 120)**	**SW846 8270C**
4-Nitrophenol	**77**	**(10 - 120)**	**SW846 8270C**
N-Nitrosodi-n-propyl-amine	**72**	**(40 - 120)**	**SW846 8270C**
Pentachlorophenol	**114**	**(20 - 130)**	**SW846 8270C**
Phenol	**63**	**(40 - 110)**	**SW846 8270C**
Pyrene	**85**	**(50 - 140)**	**SW846 8270C**
1,2,4-Trichloro-benzene	**80**	**(50 - 115)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	75	(40 - 130)
2-Fluorophenol	86	(50 - 115)
2,4,6-Tribromophenol	44	(30 - 115)
Nitrobenzene-d5	69	(45 - 115)
Phenol-d5	79	(50 - 120)
Terphenyl-d14	98	(50 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E1H090329 **Work Order #...:** EHRN01AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H100000-237
Prep Date.....: 08/09/01 **Analysis Date..:** 08/09/01
Prep Batch #...: 1222237 **Analysis Time..:** 16:35
Dilution Factor: 1 **Instrument ID..:** G15
Analyst ID.....: 001464

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Gasoline)	**87**	**(80 - 140)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	105	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E1H090329 **Work Order #...:** EHR441AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H100000-277
Prep Date.....: 08/09/01 **Analysis Date..:** 08/09/01
Prep Batch #...: 1222277 **Analysis Time..:** 19:34
Dilution Factor: 1 **Instrument ID..:** MSG
Analyst ID.....: 999998

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	**121**	**(60 - 150)**	**SW846 8260B**
Benzene	**118**	**(70 - 140)**	**SW846 8260B**
Trichloroethene	**118**	**(70 - 130)**	**SW846 8260B**
Toluene	**105**	**(70 - 130)**	**SW846 8260B**
Chlorobenzene	**107**	**(70 - 130)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(70 - 130)
1,2-Dichloroethane-d4	74	(60 - 140)
Toluene-d8	84	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E1H090000-469 **Prep Batch #...:** 1221469					
Aluminum	88	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1AV
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	86	(75 - 115)	SW846 6010B	08/09-08/10/01	EHQXL1AX
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Barium	102	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1A0
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	105	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1A1
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	109	(85 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1A2
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	106	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1A3
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Lead	92	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1A4
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	87	(70 - 115)	SW846 6010B	08/09-08/10/01	EHQXL1A5
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Silver	98	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1A6
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	105	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1A7
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	101	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1A8
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	101	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1A9
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	104	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1CA
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	90	(75 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1CC
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	105	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1CD
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	101	(80 - 120)	SW846 6010B	08/09-08/10/01	EHQXL1CE
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	93	(75 - 115)	SW846 6010B	08/09-08/10/01	EHQXL1AW
		Dilution Factor: 1			
		Analysis Time..: 12:56	Analyst ID.....: 021088	Instrument ID..: M01	
LCS Lot-Sample#: E1H090000-475 **Prep Batch #...:** 1221475					
Arsenic	87	(75 - 115)	SW846 6010B	08/09-08/10/01	EHQXX1AC
		Dilution Factor: 1			
		Analysis Time..: 17:06	Analyst ID.....: 021088	Instrument ID..: M01	
LCS Lot-Sample#: E1H100000-344 **Prep Batch #...:** 1222344					
Mercury	97	(85 - 115)	SW846 7471A	08/10-08/13/01	EHTJ71AC
		Dilution Factor: 1			
		Analysis Time..: 15:19	Analyst ID.....: 021088	Instrument ID..: M04	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...:	E1H090329	**Work Order #...:**	EHPV01AF-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1H090205-001		EHPV01AG-MSD		
Date Sampled...:	08/07/01 09:10	**Date Received..:**	08/09/01 10:15	**MS Run #.....:**	1222112
Prep Date.....:	08/09/01	**Analysis Date..:**	08/10/01		
Prep Batch #...:	1222236	**Analysis Time..:**	01:27		
Dilution Factor:	1	**Analyst ID.....:**	001464	**Instrument ID..:**	G15

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Gasoline)	**ND**	**5.91**	**5.48**	**mg/kg**	**93**		**SW846 8015B**
	ND	**5.91**	**5.30**	**mg/kg**	**90**	**3.5**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	103	(60 - 130)
	100	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID
Date Sampled...: 08/09/01 10:00 **Date Received..:** 08/09/01 15:00

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT		UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E1H090329-005 **Prep Batch #...:** 1221469										
Aluminum										
	30000	200	30000	NC	mg/kg			SW846 6010B	08/09-08/10/01	EHQTX1A2
	30000	200	32100	NC	mg/kg			SW846 6010B	08/09-08/10/01	EHQTX1A3
			Dilution Factor: 1							
			Analysis Time..: 13:21			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1221244							
Antimony										
	0.78	50.0	15.6	N	mg/kg	30		SW846 6010B	08/09-08/10/01	EHQTX1A6
	0.78	50.0	16.4	N	mg/kg	31	5.0	SW846 6010B	08/09-08/10/01	EHQTX1A7
			Dilution Factor: 1							
			Analysis Time..: 13:21			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1221244							
Barium										
	178	200	358		mg/kg	90		SW846 6010B	08/09-08/10/01	EHQTX1A8
	178	200	366		mg/kg	94	2.1	SW846 6010B	08/09-08/10/01	EHQTX1A9
			Dilution Factor: 1							
			Analysis Time..: 13:21			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1221244							
Cadmium										
	0.51	5.00	5.32		mg/kg	96		SW846 6010B	08/09-08/10/01	EHQTX1CA
	0.51	5.00	5.40		mg/kg	98	1.4	SW846 6010B	08/09-08/10/01	EHQTX1CC
			Dilution Factor: 1							
			Analysis Time..: 13:21			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1221244							
Chromium										
	32.7	20.0	51.8		mg/kg	96		SW846 6010B	08/09-08/10/01	EHQTX1CD
	32.7	20.0	54.3		mg/kg	108	4.7	SW846 6010B	08/09-08/10/01	EHQTX1CE
			Dilution Factor: 1							
			Analysis Time..: 13:21			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1221244							
Beryllium										
	0.88	5.00	5.89		mg/kg	100		SW846 6010B	08/09-08/10/01	EHQTX1CF
	0.88	5.00	5.95		mg/kg	102	1.0	SW846 6010B	08/09-08/10/01	EHQTX1CG
			Dilution Factor: 1							
			Analysis Time..: 13:21			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1221244							

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID
Date Sampled...: 08/09/01 10:00 **Date Received..:** 08/09/01 15:00

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead									
	7.3	50.0	54.7	mg/kg	95		SW846 6010B	08/09-08/10/01	EHQTX1CH
	7.3	50.0	54.5	mg/kg	94	0.40	SW846 6010B	08/09-08/10/01	EHQTX1CJ
				Dilution Factor: 1					
				Analysis Time..: 13:21		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1221244					
Selenium									
	0.81	200	170	mg/kg	84		SW846 6010B	08/09-08/10/01	EHQTX1CK
	0.81	200	173	mg/kg	86	1.9	SW846 6010B	08/09-08/10/01	EHQTX1CL
				Dilution Factor: 1					
				Analysis Time..: 13:21		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1221244					
Silver									
	ND	5.00	4.64	mg/kg	93		SW846 6010B	08/09-08/10/01	EHQTX1CM
	ND	5.00	4.70	mg/kg	94	1.4	SW846 6010B	08/09-08/10/01	EHQTX1CN
				Dilution Factor: 1					
				Analysis Time..: 13:21		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1221244					
Cobalt									
	11.2	50.0	61.9	mg/kg	101		SW846 6010B	08/09-08/10/01	EHQTX1CP
	11.2	50.0	62.0	mg/kg	102	0.22	SW846 6010B	08/09-08/10/01	EHQTX1CQ
				Dilution Factor: 1					
				Analysis Time..: 13:21		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1221244					
Copper									
	21.1	25.0	47.6	mg/kg	106		SW846 6010B	08/09-08/10/01	EHQTX1CR
	21.1	25.0	47.5	mg/kg	106	0.27	SW846 6010B	08/09-08/10/01	EHQTX1CT
				Dilution Factor: 1					
				Analysis Time..: 13:21		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1221244					
Molybdenum									
	ND	100	87.3	mg/kg	87		SW846 6010B	08/09-08/10/01	EHQTX1CU
	ND	100	87.0	mg/kg	87	0.34	SW846 6010B	08/09-08/10/01	EHQTX1CV
				Dilution Factor: 1					
				Analysis Time..: 13:21		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1221244					
Nickel									
	21.1	50.0	68.7	mg/kg	95		SW846 6010B	08/09-08/10/01	EHQTX1CW
	21.1	50.0	70.1	mg/kg	98	2.0	SW846 6010B	08/09-08/10/01	EHQTX1CX
				Dilution Factor: 1					
				Analysis Time..: 13:21		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1221244					

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID
Date Sampled...: 08/09/01 10:00 **Date Received..:** 08/09/01 15:00

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium									
	ND	200	186	mg/kg	93		SW846 6010B	08/09-08/10/01	EHQTX1C0
	ND	200	187	mg/kg	94	0.89	SW846 6010B	08/09-08/10/01	EHQTX1C1
				Dilution Factor: 1					
				Analysis Time..: 13:21		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1221244					
Vanadium									
	56.3	50.0	107	mg/kg	100		SW846 6010B	08/09-08/10/01	EHQTX1C2
	56.3	50.0	109	mg/kg	105	2.0	SW846 6010B	08/09-08/10/01	EHQTX1C3
				Dilution Factor: 1					
				Analysis Time..: 13:21		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1221244					
Zinc									
	54.5	50.0	104	mg/kg	99		SW846 6010B	08/09-08/10/01	EHQTX1C4
	54.5	50.0	105	mg/kg	102	1.2	SW846 6010B	08/09-08/10/01	EHQTX1C5
				Dilution Factor: 1					
				Analysis Time..: 13:21		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1221244					
Arsenic									
	3.7	200	180	mg/kg	88		SW846 6010B	08/09-08/10/01	EHQTX1A4
	3.7	200	181	mg/kg	89	0.66	SW846 6010B	08/09-08/10/01	EHQTX1A5
				Dilution Factor: 1					
				Analysis Time..: 13:21		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1221244					

MS Lot-Sample #: E1H090329-005 **Prep Batch #...:** 1222344

Mercury									
	ND	0.167	0.183	mg/kg	110		SW846 7471A	08/10-08/13/01	EHQTX1DD
	ND	0.167	0.192	mg/kg	115	4.4	SW846 7471A	08/10-08/13/01	EHQTX1DE
				Dilution Factor: 1					
				Analysis Time..: 15:23		Instrument ID..: M04		Analyst ID.....: 021088	
				MS Run #.....: 1222182					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...:	E1H090329	Work Order #...:	EHQTX1DA-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E1H090329-005		EHQTX1DC-MSD		
Date Sampled...:	08/09/01 10:00	Date Received..:	08/09/01 15:00	MS Run #.....:	1222102
Prep Date.....:	08/10/01	Analysis Date..:	08/13/01		
Prep Batch #...:	1222224	Analysis Time..:	21:54		
Dilution Factor:	5	Analyst ID.....:	010060	Instrument ID..:	MSI

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acenaphthene	ND	3330	4520	ug/kg	135		SW846 8270C
	Qualifiers: a,MSC						
	ND	3330	4790	ug/kg	144	5.9	SW846 8270C
	Qualifiers: a,MSC						
4-Chloro-3-methylphenol	ND	5000	4590	ug/kg	92		SW846 8270C
	ND	5000	4700	ug/kg	94	2.4	SW846 8270C
2-Chlorophenol	ND	5000	3650	ug/kg	73		SW846 8270C
	ND	5000	3650	ug/kg	73	0.13	SW846 8270C
1,4-Dichlorobenzene	ND	3330	1800	ug/kg	54		SW846 8270C
	ND	3330	1730	ug/kg	52	4.3	SW846 8270C
2,4-Dinitrotoluene	ND	3330	3860	ug/kg	116		SW846 8270C
	ND	3330	4240	ug/kg	127	9.4	SW846 8270C
	Qualifiers: a,MSC						
4-Nitrophenol	ND	5000	2020	ug/kg	40		SW846 8270C
	ND	5000	1560	ug/kg	31	25	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	3330	2720	ug/kg	82		SW846 8270C
	ND	3330	2870	ug/kg	86	5.3	SW846 8270C
Pentachlorophenol	ND	5000	3600	ug/kg	72		SW846 8270C
	ND	5000	4160	ug/kg	83	14	SW846 8270C
Phenol	ND	5000	3530	ug/kg	71		SW846 8270C
	ND	5000	3610	ug/kg	72	2.2	SW846 8270C
Pyrene	890	3330	4110	ug/kg	96		SW846 8270C
	890	3330	4240	ug/kg	100	3.1	SW846 8270C
1,2,4-Trichloro-benzene	ND	3330	2500	ug/kg	75		SW846 8270C
	ND	3330	2650	ug/kg	80	5.9	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	93	(40 - 130)
	95	(40 - 130)
2-Fluorophenol	78	(50 - 115)
	65	(50 - 115)
2,4,6-Tribromophenol	102	(30 - 115)
	111	(30 - 115)

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: E1H090329 **Work Order #...:** EHQTX1DA-MS **Matrix.....:** SOLID
MS Lot-Sample #: E1H090329-005 EHQTX1DC-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(45 - 115)
	62	(45 - 115)
Phenol-d5	80	(50 - 120)
	79	(50 - 120)
Terphenyl-d14	109	(50 - 140)
	119	(50 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...:	E1H090329	**Work Order #...:**	EHQVF1A4-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1H090329-006		EHQVF1A5-MSD		
Date Sampled...:	08/09/01 10:00	**Date Received..:**	08/09/01 15:00	**MS Run #.....:**	1222096
Prep Date.....:	08/10/01	**Analysis Date..:**	08/13/01		
Prep Batch #...:	1222223	**Analysis Time..:**	10:56		
Dilution Factor:	5	**Analyst ID.....:**	356074	**Instrument ID..:**	G02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Diesel)	**2100**	**250**		**mg/kg**	**0.0**		**SW846 8015B**
	Qualifiers: NC,MSB						
	2100	**250**		**mg/kg**	**0.0**	**0.0**	**SW846 8015B**
	Qualifiers: MC,MSB						

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	116	(60 - 130)
	113	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...:	E1H090329	**Work Order #...:**	EHQVF1A6-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1H090329-006		EHQVF1A7-MSD		
Date Sampled...:	08/09/01 10:00	**Date Received..:**	08/09/01 15:00	**MS Run #.....:**	1222142
Prep Date.....:	08/09/01	**Analysis Date..:**	08/09/01		
Prep Batch #...:	1222277	**Analysis Time..:**	23:18		
Dilution Factor:	1	**Analyst ID.....:**	999998	**Instrument ID..:**	MSG

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	**ND**	**50.0**	**47.7**	**ug/kg**	**95**		**SW846 8260B**
	ND	**50.0**	**51.2**	**ug/kg**	**102**	**7.1**	**SW846 8260B**
Benzene	**ND**	**50.0**	**45.0**	**ug/kg**	**90**		**SW846 8260B**
	ND	**50.0**	**48.2**	**ug/kg**	**96**	**6.7**	**SW846 8260B**
Trichloroethene	**ND**	**50.0**	**45.9**	**ug/kg**	**92**		**SW846 8260B**
	ND	**50.0**	**41.6**	**ug/kg**	**83**	**10**	**SW846 8260B**
Toluene	**ND**	**50.0**	**41.1**	**ug/kg**	**82**		**SW846 8260B**
	ND	**50.0**	**45.7**	**ug/kg**	**91**	**11**	**SW846 8260B**
Chlorobenzene	**ND**	**50.0**	**39.4**	**ug/kg**	**79**		**SW846 8260B**
	ND	**50.0**	**38.9**	**ug/kg**	**78**	**1.2**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	115	(70 - 130)
	147 I,*	(70 - 130)
1,2-Dichloroethane-d4	75	(60 - 140)
	77	(60 - 140)
Toluene-d8	88	(70 - 130)
	94	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

I Matrix interference.

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID
Date Sampled...: 08/09/01 11:00 **Date Received..:** 08/09/01 15:00

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E1H090329-021 **Prep Batch #...:** 1221475									
Arsenic									
	2.9	200	184	mg/kg	91		SW846 6010B	08/09-08/10/01	EHQWD1AC
	2.9	200	168	mg/kg	83	8.9	SW846 6010B	08/09-08/10/01	EHQWD1AD

Dilution Factor: 1
Analysis Time..: 17:46 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 1221247

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...:	E1H090329	**Work Order #...:**	EHPV01AF-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1H090205-001		EHPV01AG-MSD		
Date Sampled...:	08/07/01 09:10	**Date Received..:**	08/09/01 10:15	**MS Run #.....:**	1222112
Prep Date.....:	08/09/01	**Analysis Date..:**	08/10/01		
Prep Batch #...:	1222236	**Analysis Time..:**	01:27		
Dilution Factor:	1	**Analyst ID.....:**	001464	**Instrument ID..:**	G15

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	**93**	**(80 - 140)**			**SW846 8015B**
	90	**(80 - 140)**	**3.5**	**(0-40)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	103	(60 - 130)
	100	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID
Date Sampled...: 08/09/01 10:00 **Date Received..:** 08/09/01 15:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E1H090329-005 **Prep Batch #...:** 1221469							
Aluminum	NC	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1A2
	NC	(80 - 120)		(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1A3
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Antimony	30 N	(75 - 115)			SW846 6010B	08/09-08/10/01	EHQTX1A6
	31 N	(75 - 115)	5.0	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1A7
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Barium	90	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1A8
	94	(80 - 120)	2.1	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1A9
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Cadmium	96	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1CA
	98	(80 - 120)	1.4	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1CC
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Chromium	96	(85 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1CD
	108	(85 - 120)	4.7	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1CE
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Beryllium	100	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1CF
	102	(80 - 120)	1.0	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1CG
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Lead	95	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1CH
	94	(80 - 120)	0.40	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1CJ
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID
Date Sampled...: 08/09/01 10:00 **Date Received..:** 08/09/01 15:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	84	(70 - 115)			SW846 6010B	08/09-08/10/01	EHQTX1CK
	86	(70 - 115)	1.9	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1CL
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Silver	93	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1CM
	94	(80 - 120)	1.4	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1CN
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Cobalt	101	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1CP
	102	(80 - 120)	0.22	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1CQ
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Copper	106	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1CR
	106	(80 - 120)	0.27	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1CT
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Molybdenum	87	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1CU
	87	(80 - 120)	0.34	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1CV
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Nickel	95	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1CW
	98	(80 - 120)	2.0	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1CX
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Thallium	93	(75 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1C0
	94	(75 - 120)	0.89	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1C1
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					
Vanadium	100	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1C2
	105	(80 - 120)	2.0	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1C3
		Dilution Factor: 1					
		Analysis Time..: 13:21			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1221244					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID
Date Sampled...: 08/09/01 10:00 **Date Received..:** 08/09/01 15:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Zinc	99	(80 - 120)			SW846 6010B	08/09-08/10/01	EHQTX1C4
	102	(80 - 120)	1.2	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1C5

Dilution Factor: 1
Analysis Time..: 13:21 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 1221244

Arsenic	88	(75 - 115)			SW846 6010B	08/09-08/10/01	EHQTX1A4
	89	(75 - 115)	0.66	(0-25)	SW846 6010B	08/09-08/10/01	EHQTX1A5

Dilution Factor: 1
Analysis Time..: 13:21 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 1221244

MS Lot-Sample #: E1H090329-005 **Prep Batch #...:** 1222344

Mercury	110	(80 - 120)			SW846 7471A	08/10-08/13/01	EHQTX1DD
	115	(80 - 120)	4.4	(0-20)	SW846 7471A	08/10-08/13/01	EHQTX1DE

Dilution Factor: 1
Analysis Time..: 15:23 Instrument ID..: M04 Analyst ID.....: 021088
MS Run #.....: 1222182

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...:	E1H090329	Work Order #...:	EHQTX1DA-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E1H090329-005		EHQTX1DC-MSD		
Date Sampled...:	08/09/01 10:00	Date Received..:	08/09/01 15:00	MS Run #.....:	1222102
Prep Date.....:	08/10/01	Analysis Date..:	08/13/01		
Prep Batch #...:	1222224	Analysis Time..:	21:54		
Dilution Factor:	5	Analyst ID.....:	010060	Instrument ID..:	MSI

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	135 a,MSC	(50 - 125)			SW846 8270C
	144 a,MSC	(50 - 125)	5.9	(0-35)	SW846 8270C
4-Chloro-3-methylphenol	92	(50 - 110)			SW846 8270C
	94	(50 - 110)	2.4	(0-35)	SW846 8270C
2-Chlorophenol	73	(50 - 120)			SW846 8270C
	73	(50 - 120)	0.13	(0-35)	SW846 8270C
1,4-Dichlorobenzene	54	(40 - 115)			SW846 8270C
	52	(40 - 115)	4.3	(0-35)	SW846 8270C
2,4-Dinitrotoluene	116	(40 - 120)			SW846 8270C
	127 a,MSC	(40 - 120)	9.4	(0-35)	SW846 8270C
4-Nitrophenol	40	(10 - 120)			SW846 8270C
	31	(10 - 120)	25	(0-35)	SW846 8270C
N-Nitrosodi-n-propyl-amine	82	(40 - 120)			SW846 8270C
	86	(40 - 120)	5.3	(0-35)	SW846 8270C
Pentachlorophenol	72	(20 - 130)			SW846 8270C
	83	(20 - 130)	14	(0-35)	SW846 8270C
Phenol	71	(40 - 110)			SW846 8270C
	72	(40 - 110)	2.2	(0-35)	SW846 8270C
Pyrene	96	(50 - 140)			SW846 8270C
	100	(50 - 140)	3.1	(0-35)	SW846 8270C
1,2,4-Trichloro-benzene	75	(50 - 115)			SW846 8270C
	80	(50 - 115)	5.9	(0-35)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	93	(40 - 130)
	95	(40 - 130)
2-Fluorophenol	78	(50 - 115)
	65	(50 - 115)
2,4,6-Tribromophenol	102	(30 - 115)
	111	(30 - 115)
Nitrobenzene-d5	58	(45 - 115)
	62	(45 - 115)
Phenol-d5	80	(50 - 120)
	79	(50 - 120)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: E1H090329 **Work Order #...:** EHQTX1DA-MS **Matrix.....:** SOLID
MS Lot-Sample #: E1H090329-005 EHQTX1DC-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	109	(50 - 140)
	119	(50 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...:	E1H090329	**Work Order #...:**	EHQVF1A4-MS EHQVF1A5-MSD	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1H090329-006				
Date Sampled...:	08/09/01 10:00	**Date Received..:**	08/09/01 15:00	**MS Run #.....:**	1222096
Prep Date.....:	08/10/01	**Analysis Date..:**	08/13/01		
Prep Batch #...:	1222223	**Analysis Time..:**	10:56		
Dilution Factor:	5	**Analyst ID.....:**	356074	**Instrument ID..:**	G02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**0.0 NC,MS**	**(60 - 130)**			**SW846 8015B**
	0.0 MC,MS	**(60 - 130)**	**0.0**	**(0-35)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	116	(60 - 130)
	113	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	E1H090329	**Work Order #...:**	EHQVF1A6-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1H090329-006		EHQVF1A7-MSD		
Date Sampled...:	08/09/01 10:00	**Date Received..:**	08/09/01 15:00	**MS Run #.....:**	1222142
Prep Date.....:	08/09/01	**Analysis Date..:**	08/09/01		
Prep Batch #...:	1222277	**Analysis Time..:**	23:18		
Dilution Factor:	1	**Analyst ID.....:**	999998	**Instrument ID..:**	MSG

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**95**	**(60 - 150)**			**SW846 8260B**
	102	**(60 - 150)**	**7.1**	**(0-30)**	**SW846 8260B**
Benzene	**90**	**(70 - 140)**			**SW846 8260B**
	96	**(70 - 140)**	**6.7**	**(0-30)**	**SW846 8260B**
Trichloroethene	**92**	**(70 - 130)**			**SW846 8260B**
	83	**(70 - 130)**	**10**	**(0-30)**	**SW846 8260B**
Toluene	**82**	**(70 - 130)**			**SW846 8260B**
	91	**(70 - 130)**	**11**	**(0-30)**	**SW846 8260B**
Chlorobenzene	**79**	**(70 - 130)**			**SW846 8260B**
	78	**(70 - 130)**	**1.2**	**(0-30)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	115	(70 - 130)
	147 I,*	(70 - 130)
1,2-Dichloroethane-d4	75	(60 - 140)
	77	(60 - 140)
Toluene-d8	88	(70 - 130)
	94	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

I Matrix interference.

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1H090329 **Matrix.....:** SOLID
Date Sampled...: 08/09/01 11:00 **Date Received..:** 08/09/01 15:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E1H090329-021 **Prep Batch #...:** 1221475							
Arsenic	91	(75 - 115)			SW846 6010B	08/09-08/10/01	EHQWD1AC
	83	(75 - 115)	8.9	(0-25)	SW846 6010B	08/09-08/10/01	EHQWD1AD

Dilution Factor: 1
Analysis Time..: 17:46 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 1221247

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Subcontracted Analysis

Del Mar Analytical

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LABORATORY REPORT

Prepared For: STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705

Attention: Diane Suzuki
Project: E1H090329

Sampled: 08/09/01
Received: 08/09/01
Reported: 08/14/01

This laboratory report is confidential and is intended for the sole use of Del Mar Analytical and its client. This entire report was reviewed and approved for release.

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Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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Del Mar Analytical

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STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1H090329

Report Number: CKH0094

Sampled:08/09/01
Received:08/09/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg	ug/kg				
Sample ID: CKH0094-01 (SP_15_3_080901 - Soil)								
Acenaphthene	EPA 8310	C1H1012	10000	ND	200	8/10/01	8/13/01	
Acenaphthylene	EPA 8310	C1H1012	40000	ND	200	8/10/01	8/13/01	
Anthracene	EPA 8310	C1H1012	400	**1100**	200	8/10/01	8/13/01	
Benzo(a)anthracene	EPA 8310	C1H1012	400	ND	200	8/10/01	8/13/01	
Benzo(a)pyrene	EPA 8310	C1H1012	400	**150**	200	8/10/01	8/13/01	J
Benzo(b)fluoranthene	EPA 8310	C1H1012	1000	**56**	200	8/10/01	8/13/01	J
Benzo(g,h,i)perylene	EPA 8310	C1H1012	1000	**84**	200	8/10/01	8/13/01	J
Benzo(k)fluoranthene	EPA 8310	C1H1012	400	**160**	200	8/10/01	8/13/01	J
Chrysene	EPA 8310	C1H1012	1000	ND	200	8/10/01	8/13/01	
Dibenzo(a,h)anthracene	EPA 8310	C1H1012	1000	ND	200	8/10/01	8/13/01	
Fluoranthene	EPA 8310	C1H1012	1000	**1300**	200	8/10/01	8/13/01	
Fluorene	EPA 8310	C1H1012	1000	**3200**	200	8/10/01	8/13/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1H1012	1000	**110**	200	8/10/01	8/13/01	J
Naphthalene	EPA 8310	C1H1012	8000	ND	200	8/10/01	8/13/01	
Phenanthrene	EPA 8310	C1H1012	1000	**7700**	200	8/10/01	8/13/01	
Pyrene	EPA 8310	C1H1012	1000	ND	200	8/10/01	8/13/01	
Surrogate: 2-Methylanthracene (35-115%)				*21400 %*				*Z3*
Sample ID: CKH0094-02 (SP_15_4_080901 - Soil)								
Acenaphthene	EPA 8310	C1H1012	5000	ND	100	8/10/01	8/13/01	
Acenaphthylene	EPA 8310	C1H1012	20000	ND	100	8/10/01	8/13/01	
Anthracene	EPA 8310	C1H1012	200	**540**	100	8/10/01	8/13/01	
Benzo(a)anthracene	EPA 8310	C1H1012	200	**35**	100	8/10/01	8/13/01	J
Benzo(a)pyrene	EPA 8310	C1H1012	200	**150**	100	8/10/01	8/13/01	J
Benzo(b)fluoranthene	EPA 8310	C1H1012	500	**220**	100	8/10/01	8/13/01	J
Benzo(g,h,i)perylene	EPA 8310	C1H1012	500	**57**	100	8/10/01	8/13/01	J
Benzo(k)fluoranthene	EPA 8310	C1H1012	200	**110**	100	8/10/01	8/13/01	J
Chrysene	EPA 8310	C1H1012	500	**650**	100	8/10/01	8/13/01	
Dibenzo(a,h)anthracene	EPA 8310	C1H1012	500	ND	100	8/10/01	8/13/01	
Fluoranthene	EPA 8310	C1H1012	500	**770**	100	8/10/01	8/13/01	
Fluorene	EPA 8310	C1H1012	500	**1600**	100	8/10/01	8/13/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1H1012	500	**77**	100	8/10/01	8/13/01	J
Naphthalene	EPA 8310	C1H1012	4000	ND	100	8/10/01	8/13/01	
Phenanthrene	EPA 8310	C1H1012	500	**3700**	100	8/10/01	8/13/01	
Pyrene	EPA 8310	C1H1012	500	**350**	100	8/10/01	8/13/01	J
Surrogate: 2-Methylanthracene (35-115%)				*10900 %*				*Z3*

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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Del Mar Analytical

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1H090329

Report Number: CKH0094

Sampled:08/09/01
Received:08/09/01

METHOD BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: C1H1012 Extracted: 08/10/01										
Blank Analyzed: 08/13/01 (C1H1012-BLK1)										
Acenaphthene	ND	50	ug/kg							
Acenaphthylene	55.7	200	ug/kg							J
Anthracene	0.141	2.0	ug/kg							J
Benzo(a)anthracene	ND	2.0	ug/kg							
Benzo(a)pyrene	ND	2.0	ug/kg							
Benzo(b)fluoranthene	ND	5.0	ug/kg							
Benzo(g,h,i)perylene	ND	5.0	ug/kg							
Benzo(k)fluoranthene	ND	2.0	ug/kg							
Chrysene	ND	5.0	ug/kg							
Dibenzo(a,h)anthracene	ND	5.0	ug/kg							
Fluoranthene	ND	5.0	ug/kg							
Fluorene	ND	5.0	ug/kg							
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/kg							
Naphthalene	15.3	40	ug/kg							J
Phenanthrene	0.634	5.0	ug/kg							J
Pyrene	ND	5.0	ug/kg							
Surrogate: 2-Methylanthracene	*6.39*		*ug/kg*	*8.00*		*79.9*	*35-115*			
LCS Analyzed: 08/13/01 (C1H1012-BS1)										
Acenaphthene	109	50	ug/kg	160		68.1	45-115			
Acenaphthylene	314	200	ug/kg	320		98.1	50-115			
Anthracene	12.9	2.0	ug/kg	16.0		80.6	55-115			
Benzo(a)anthracene	14.5	2.0	ug/kg	16.0		90.6	65-115			
Benzo(a)pyrene	11.3	2.0	ug/kg	16.0		70.6	55-115			
Benzo(b)fluoranthene	29.4	5.0	ug/kg	32.0		91.9	65-115			
Benzo(g,h,i)perylene	28.0	5.0	ug/kg	32.0		87.5	60-115			
Benzo(k)fluoranthene	14.4	2.0	ug/kg	16.0		90.0	65-115			
Chrysene	13.1	5.0	ug/kg	16.0		81.9	65-115			
Dibenzo(a,h)anthracene	27.2	5.0	ug/kg	32.0		85.0	60-115			
Fluoranthene	28.7	5.0	ug/kg	32.0		89.7	65-115			
Fluorene	31.2	5.0	ug/kg	32.0		97.5	55-115			
Indeno(1,2,3-cd)pyrene	13.8	5.0	ug/kg	16.0		86.2	55-115			
Naphthalene	145	40	ug/kg	160		90.6	45-115			
Phenanthrene	16.5	5.0	ug/kg	16.0		103	55-120			
Pyrene	13.8	5.0	ug/kg	16.0		86.2	55-115			

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1H090329

Report Number: CKH0094

Sampled:08/09/01
Received:08/09/01

METHOD BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: C1H1012 Extracted: 08/10/01										
LCS Analyzed: 08/13/01 (C1H1012-BS1)										
Surrogate: 2-Methylanthracene	*6.35*		*ug/kg*	*8.00*		*79.4*	*35-115*			
Matrix Spike Analyzed: 08/13/01 (C1H1012-MS1)					**Source: CKH0072-01**					
Acenaphthene	109	50	ug/kg	160	ND	68.1	40-115			
Acenaphthylene	323	200	ug/kg	320	70	79.1	35-130			
Anthracene	14.2	2.0	ug/kg	16.0	1.4	80.0	40-115			
Benzo(a)anthracene	13.7	2.0	ug/kg	16.0	0.85	80.3	45-130			
Benzo(a)pyrene	11.8	2.0	ug/kg	16.0	2.1	60.6	50-115			
Benzo(b)fluoranthene	33.3	5.0	ug/kg	32.0	0.47	103	40-130			
Benzo(g,h,i)perylene	24.8	5.0	ug/kg	32.0	ND	77.5	45-115			
Benzo(k)fluoranthene	13.4	2.0	ug/kg	16.0	0.98	77.6	40-125			
Chrysene	15.7	5.0	ug/kg	16.0	2.9	80.0	45-125			
Dibenzo(a,h)anthracene	16.5	5.0	ug/kg	32.0	ND	51.6	25-130			
Fluoranthene	47.2	5.0	ug/kg	32.0	15	101	50-135			
Fluorene	24.9	5.0	ug/kg	32.0	2.0	71.6	35-120			
Indeno(1,2,3-cd)pyrene	13.0	5.0	ug/kg	16.0	2.4	66.2	40-120			
Naphthalene	600	40	ug/kg	160	ND	375	30-115			*M1*
Phenanthrene	24.7	5.0	ug/kg	16.0	7.6	107	30-160			
Pyrene	5.06	5.0	ug/kg	16.0	ND	31.6	20-165			
Surrogate: 2-Methylanthracene	*6.49*		*ug/kg*	*8.00*		*81.1*	*35-115*			
Matrix Spike Dup Analyzed: 08/13/01 (C1H1012-MSD1)					**Source: CKH0072-01**					
Acenaphthene	125	50	ug/kg	160	ND	78.1	40-115	13.7	25	
Acenaphthylene	354	200	ug/kg	320	70	88.8	35-130	9.16	25	
Anthracene	15.2	2.0	ug/kg	16.0	1.4	86.2	40-115	6.80	25	
Benzo(a)anthracene	15.5	2.0	ug/kg	16.0	0.85	91.6	45-130	12.3	20	
Benzo(a)pyrene	12.7	2.0	ug/kg	16.0	2.1	66.2	50-115	7.35	20	
Benzo(b)fluoranthene	38.5	5.0	ug/kg	32.0	0.47	119	40-130	14.5	25	
Benzo(g,h,i)perylene	30.4	5.0	ug/kg	32.0	ND	95.0	45-115	20.3	20	*R*
Benzo(k)fluoranthene	14.2	2.0	ug/kg	16.0	0.98	82.6	40-125	5.80	25	
Chrysene	18.0	5.0	ug/kg	16.0	2.9	94.4	45-125	13.6	30	
Dibenzo(a,h)anthracene	16.1	5.0	ug/kg	32.0	ND	50.3	25-130	2.45	30	
Fluoranthene	53.9	5.0	ug/kg	32.0	15	122	50-135	13.3	25	
Fluorene	25.6	5.0	ug/kg	32.0	2.0	73.8	35-120	2.77	20	
Indeno(1,2,3-cd)pyrene	16.8	5.0	ug/kg	16.0	2.4	90.0	40-120	25.5	20	*R*

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1H090329

Report Number: CKH0094

Sampled:08/09/01
Received:08/09/01

METHOD BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: C1H1012 Extracted: 08/10/01										
Matrix Spike Dup Analyzed: 08/13/01 (C1H1012-MSD1)					**Source: CKH0072-01**					
Naphthalene	703	40	ug/kg	160	ND	439	30-115	15.8	25	*M1*
Phenanthrene	27.4	5.0	ug/kg	16.0	7.6	124	30-160	10.4	30	
Pyrene	18.9	5.0	ug/kg	16.0	ND	118	20-165	116	20	*R*
Surrogate: 2-Methylanthracene	*6.94*		*ug/kg*	*8.00*		*86.8*	*35-115*			

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles 1721 S. Grand Avenue Santa Ana, CA 92705 Attention: Diane Suzuki	Client Project ID: E1H090329 Report Number: CKH0094	Sampled:08/09/01 Received:08/09/01

DATA QUALIFIERS AND DEFINITIONS

J	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of unknown quality.
M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
R	The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.
Z3	The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
NR	Not reported.
RPD	Relative Percent Difference

el Mar Analytical, Colton
lifton J. Kiser
Project Manager

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[redacted]

TO: DelMar - Alton.

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc

KH0094

STL-4124 (0700)

Client	Project Manager	Date	Chain of Custody Number
STL - LA	D. Suzuki	08/09/01	054081

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
1721 So Grand Ave.	(714) 258 - 860 Ext 309	EH090329	

City	State	Zip Code	Site Contact	Lab Contact
Santa Ana	CA	92705	—	—

Project Name and Location (State)

Carrier/Waybill Number

Contract/Purchase Order/Quote No.

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	PAH	Special Instructions/ Conditions of Receipt
SP-15-3-080901	08/09/01	1000				X							X	
SP-15-4-080901	"	"											X	

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required

☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other_____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By [signature]	8/09/01	16:20	1. Received By [signature]	8/9/01	1620
2. Relinquished By [signature]	8.9.01	1645	2. Received By [signature]	8/9/01	[illegible]
3. Relinquished By [signature]	8-9-01	1215	3. Received By [signature]	8/9/01	18.15

Comments

2°C

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

BOE-C6-0233138

SEVERN
TRENT
SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

August 7, 2001

STL LOT NUMBER: E1G300190
NELAC Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the 12 samples received under chain of custody by STL Los Angeles on July 30, 2001. These samples are associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report. As per request on the chain of custody, it has been determined that the PAH would be analyzed on sample AK-14-5.

STL Los Angeles certifies that the tests performed at our facility meet all the requirements of NELAC. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,

Diane Suzuki
Project Manager
CC: Project File

This report contains 000129 pages.

STL Los Angeles is a part of Severn Trent Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

BOE-C6-0233139

SEVERN TRENT SERVICES

LOT NUMBER E1G300190

Affected Method: 8310

Affected Samples:
E1G300190 (1): BLDG2_AK_11_1
E1G300190 (2): BLDG2_AK_11_2
E1G300190 (3): BLDG2_AK_11_3
E1G300190 (4): BLDG2_AK_11_4
E1G300190 (5): BLDG2_AK_11_5
E1G300190 (11): SP_16_1
E1G300190 (12): SP_16_2

Nonconformance 07-14644
Case Narrative:
There was insufficient sample volume to prepare an MS/SD pair with this batch. A second LCS was prepared instead.

Nonconformance 07-14657
Case Narrative:
The method blank had surrogate recovery at 14%.
The sample data has been reviewed by QA, and in addition to the low method blank surrogate recovery, there was low recovery in the LCS for early compounds (napthalene and acenapthene were below control limits, acenapthylene and flourene were biased low compared to the remaining compounds but within the control limits

Based on the LCS data, low bias is possible for the early compounds (naphathalene, acenapthene, acenapthylene, and flourene). Due to the degree of matrix present in most of the samples, re-extraction is not recommended.

Nonconformance 07-14659
Case Narrative:
LCS 1 had the following compound recoveries out of control:

1-methylnaphthalene (surrogate) 6.9%
naphthalene 9.8%
acenaphthene 10.1%

Due to these recoveries, RPD was out of control. The MB, LCS2 and samples all had good recoveries within acceptance criteria. The LCS1 as assumed to be an anomaly to the extraction. There was no adverse impact on the data and the results were reported as measured.

ACCREDITED IN ACCORDANCE WITH nelac

SEVERN TRENT SERVICES

LOT NUMBER E1G300190

Affected Method: 8310

Affected Samples:
E1G300190 (10): AK_14_5

Nonconformance 07-14699
Case Narrative:
Sample required a 10X and 100x dilution to bring the analytes response within the calibration range. Subsequently, the surrogate spikes were diluted out and recoveries could not be evaluated. However, the surrogate recoveries in the method blank and LCS were within the QC limits, demonstrating acceptable method performance.

Nonconformance 07-14704
Case Narrative:
The control analytes were in control. The RPD for Dibenz (a,h) anthracene, exceeded the stated control limit of 0-50% (57%). Since this is not a controlled parameter, no corrective action was taken.

ACCREDITED IN ACCORDANCE WITH nelac

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 7/30/01	Chain of Custody Number: 054011
Address: 9040 FRIARS RD. SUITE 220	Telephone Number (Area Code)/Fax Number: (619) 280-9210	Lab Number: E1G300190	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: RICH FARSON	Lab Contact: DIANE SUZUKI	
Project Name and Location (State): FORMER C6 BOEING	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	Analysis: TPH	VOC'S	METALS	PAH	Special Instructions/ Conditions of Receipt
2AK-11-1	7/30/01	10:30				X							X	X	X	X	
BLDG2-AK-11-2	↓	↓				↓							↓	↓	↓	↓	
AK-11-3																	
AK-11-4																	
AK-11-5																	
AK-14-1		15:00											X	X			HIGHEST TPH FROM AK-14 GETS PAH ALSO
AK-14-2																	
AK-14-3																	
AK-14-4																	
AK-14-5																	
SP-16-1		16:00											X	X	X	X	
SP-16-2													X	X	X	X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

1. Relinquished By: TRAVIS HAMMOND	Date: 7/30/01	Time: 4:30	1. Received By: [signature]	Date: 7-30-01	Time: 1630
2. Relinquished By: [signature]	Date: 7-30-01	Time: 1745	2. Received By: [signature]	Date: 7/30/01	Time: 17:45
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments:

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

BOE-C6-0233142

STL LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 7/30/01

Quantims Lot #: EIG300190
Quote #: 42295
Client Name: Haley & Aldrich
Project: BRC C-6
Received by: [illegible]
Date/Time Received: 7/30/01 17:45
Delivered by : ☐Client ☐Airborne ☐Fed Ex ☐DHL ☐Ultra-Ex ☐Rey B. ☐UPS ☐DES ☒Other Mike H.

	Initial / Date
Custody Seal Status: ☐Intact ☐Broken ☒None	AR 7/30/01
Custody Seal #(s): ☒No Seal #	
Sample Container(s): ☐STL-LA ☒Client ☐N/A	
Temperature(s) (COOLER/BLANK) in °C: 5°C (CORRECTED TEMP) 5.2°C	
Thermometer Used : ☒IR (Infra-red) ☐Digital (Probe)	
Samples: ☒Intact ☐Broken ☐Other	
Anomalies: ☒No ☐Yes (See Clouseau)	
Labeled by RS	
Labeling checked by AR	
Turn Around Time: ☒RUSH-24HR ☐RUSH-48HR ☐RUSH-72HR ☐NORMAL	
Short-Hold Notification: ☐Ph ☐Wet Chem ☐Metals (Filter/Pres) ☐Encore ☒N/A	↓
Outside Analysis(es) (Test/Lab/Date Sent Out) : 8310 @ WSAC	

********** LEAVE NO BLANK SPACES ; USE N/A **********

Fraction	1→12										PH
VOAh /*											N/A
B Sleeve	1										—

k:HCl na:Sodium Hydroxide zinc:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field Filtered n/f:HNO3-Lab Filtered
CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA

* Number of VOA's w/ Headspace present

LOGGED BY/DATE: [illegible] 7/30/01 REVIEWED BY/DATE: [illegible]

HALEY & ALDRICH INC

Client Sample ID: SP_16_1

GC Semivolatiles

Lot-Sample #...:	E1G300190-011	**Work Order #...:**	EG6W71AD	**Matrix.....:**	SOLID
Date Sampled...:	07/30/01 16:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1211297
Prep Date.....:	07/30/01	**Analysis Date..:**	08/01/01		
Prep Batch #...:	1211559	**Analysis Time..:**	08:20		
Dilution Factor:	5				
Analyst ID.....:	356074	**Instrument ID..:**	G02		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C8-C9	ND	50	mg/kg	25
C10-C11	**68**	**50**	**mg/kg**	**25**
C12-C13	**160**	**50**	**mg/kg**	**25**
C14-C15	**290**	**50**	**mg/kg**	**25**
C16-C17	**210**	**50**	**mg/kg**	**25**
C18-C19	**150**	**50**	**mg/kg**	**25**
C20-C23	**43 J**	**50**	**mg/kg**	**25**
C24-C27	ND	50	mg/kg	25
C28-C31	ND	50	mg/kg	25
C32-C35	ND	50	mg/kg	25
C36-C39	ND	50	mg/kg	25
C40+	ND	50	mg/kg	25
Total Carbon Chain Range	**950**	**50**	**mg/kg**	**25**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	88	(60 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_16_1

GC Volatiles

Lot-Sample #...:	E1G300190-011	**Work Order #...:**	EG6W71AE	**Matrix.....:**	SOLID
Date Sampled...:	07/30/01 16:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1212193
Prep Date.....:	07/30/01	**Analysis Date..:**	07/30/01		
Prep Batch #...:	1212357	**Analysis Time..:**	23:05		
Dilution Factor:	1				
Analyst ID.....:	001464	**Instrument ID..:**	G15		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	**1.0**	**1.0**	**mg/kg**	**0.10**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	88	(60 - 130)

NOTE(S):

Unknown hydrocarbon pattern.

HALEY & ALDRICH INC

Client Sample ID: SP_16_1

GC/MS Volatiles

Lot-Sample #...:	E1G300190-011	**Work Order #...:**	EG6W71AF	**Matrix.....:**	SOLID
Date Sampled...:	07/30/01 16:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1212314
Prep Date.....:	07/31/01	**Analysis Date..:**	07/31/01		
Prep Batch #...:	1212600	**Analysis Time..:**	16:42		
Dilution Factor:	5				
Analyst ID.....:	015590	**Instrument ID..:**	MSD		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	50	ug/kg	5.0
Chloromethane	ND	50	ug/kg	15
Vinyl chloride	ND	50	ug/kg	10
Bromomethane	ND	50	ug/kg	10
1,2-Dibromoethane	ND	25	ug/kg	15
Chloroethane	ND	50	ug/kg	10
Trichlorofluoromethane	ND	50	ug/kg	10
Acrolein	ND	500	ug/kg	150
1,1-Dichloroethene	ND	25	ug/kg	10
Iodomethane	ND	50	ug/kg	25
Acetone	ND	120	ug/kg	75
Carbon disulfide	ND	25	ug/kg	10
Methylene chloride	ND	25	ug/kg	15
trans-1,2-Dichloroethene	ND	25	ug/kg	10
Acrylonitrile	ND	500	ug/kg	150
Methyl tert-butyl ether	ND	25	ug/kg	5.0
1,1-Dichloroethane	ND	25	ug/kg	5.0
Vinyl acetate	ND	50	ug/kg	25
2,2-Dichloropropane	ND	25	ug/kg	10
cis-1,2-Dichloroethene	ND	25	ug/kg	10
2-Butanone	ND	120	ug/kg	75
Bromochloromethane	ND	25	ug/kg	5.0
Chloroform	ND	25	ug/kg	5.0
Tetrahydrofuran	ND	100	ug/kg	50
1,1,1-Trichloroethane	ND	25	ug/kg	5.0
1,1-Dichloropropene	ND	25	ug/kg	5.0
Carbon tetrachloride	ND	25	ug/kg	5.0
Benzene	ND	25	ug/kg	10
1,2-Dichloroethane	ND	25	ug/kg	5.0
Trichloroethene	ND	25	ug/kg	10
1,2-Dichloropropane	ND	25	ug/kg	5.0
Bromodichloromethane	ND	25	ug/kg	5.0
2-Chloroethyl vinyl ether	ND	50	ug/kg	25
cis-1,3-Dichloropropene	ND	25	ug/kg	5.0
4-Methyl-2-pentanone	ND	120	ug/kg	50
Toluene	ND	25	ug/kg	10
trans-1,3-Dichloropropene	ND	25	ug/kg	15

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SP_16_1

GC/MS Volatiles

Lot-Sample #...: E1G300190-011 Work Order #...: EG6W71AF Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	25	ug/kg	15
Tetrachloroethene	ND	25	ug/kg	10
2-Hexanone	ND	120	ug/kg	50
Dibromochloromethane	ND	25	ug/kg	25
Chlorobenzene	ND	25	ug/kg	10
Ethylbenzene	**240**	**25**	**ug/kg**	**10**
Xylenes (total)	**1100**	**25**	**ug/kg**	**15**
Styrene	ND	50	ug/kg	10
Bromoform	ND	25	ug/kg	15
Isopropylbenzene	**98**	**25**	**ug/kg**	**10**
p-Isopropyltoluene	**260**	**25**	**ug/kg**	**10**
Bromobenzene	ND	25	ug/kg	10
1,1,1,2-Tetrachloroethane	ND	25	ug/kg	15
1,1,2,2-Tetrachloroethane	ND	25	ug/kg	15
1,2,3-Trichloropropane	ND	25	ug/kg	15
n-Propylbenzene	**330**	**25**	**ug/kg**	**10**
2-Chlorotoluene	ND	25	ug/kg	10
4-Chlorotoluene	ND	25	ug/kg	10
1,3,5-Trimethylbenzene	**680**	**25**	**ug/kg**	**10**
tert-Butylbenzene	ND	25	ug/kg	10
1,2,4-Trimethylbenzene	**1900**	**25**	**ug/kg**	**10**
sec-Butylbenzene	**290**	**25**	**ug/kg**	**10**
1,3-Dichlorobenzene	ND	25	ug/kg	10
1,4-Dichlorobenzene	ND	25	ug/kg	10
1,2-Dichlorobenzene	ND	25	ug/kg	10
n-Butylbenzene	**370**	**25**	**ug/kg**	**10**
1,2-Dibromo-3-chloro-propane	ND	50	ug/kg	15
1,2,4-Trichloro-benzene	ND	25	ug/kg	10
Hexachlorobutadiene	ND	25	ug/kg	10
1,2,3-Trichlorobenzene	ND	25	ug/kg	10
t-Butanol	ND	500	ug/kg	250
Isopropyl ether	ND	50	ug/kg	5.0
Tert-amyl methyl ether	ND	50	ug/kg	10
Tert-butyl ethyl ether	ND	50	ug/kg	5.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	117	(70 - 130)
1,2-Dichloroethane-d4	99	(60 - 140)
Toluene-d8	101	(70 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP_16_1

HPLC

Lot-Sample #...:	E1G300190-011	**Work Order #...:**	EG6W71AG	**Matrix.....:**	SOLID
Date Sampled...:	07/30/01 16:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	
Prep Date.....:	07/31/01	**Analysis Date..:**	08/02/01		
Prep Batch #...:	1212425	**Analysis Time..:**	02:37		
Dilution Factor:	10				
Analyst ID.....:	057134	**Instrument ID..:**	LC7		
		Method.....:	SW846 8310		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	4000	ug/kg	630
Acenaphthylene	ND	2000	ug/kg	460
Anthracene	**91**	**80**	**ug/kg**	**11**
Benzo(a)anthracene	ND G	800	ug/kg	17
Benzo(a)pyrene	ND G	200	ug/kg	31
Benzo(b)fluoranthene	ND G	200	ug/kg	24
Benzo(ghi)perylene	ND G	500	ug/kg	31
Benzo(k)fluoranthene	ND	40	ug/kg	11
Chrysene	ND G	300	ug/kg	140
Dibenz(a,h)anthracene	ND	400	ug/kg	92
Fluoranthene	ND G	2500	ug/kg	48
Fluorene	**640**	**400**	**ug/kg**	**67**
Indeno(1,2,3-cd)pyrene	ND	200	ug/kg	31
Naphthalene	**1700 J**	**2000**	**ug/kg**	**230**
Phenanthrene	**2100**	**160**	**ug/kg**	**26**
Pyrene	ND G	600	ug/kg	110

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	0.0 SRD	(41 - 115)

NOTE(S):

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_16_2

GC Semivolatiles

Lot-Sample #...:	E1G300190-012	**Work Order #...:**	EG6W81AD	**Matrix.....:**	SOLID
Date Sampled...:	07/30/01 16:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1211297
Prep Date.....:	07/30/01	**Analysis Date..:**	08/01/01		
Prep Batch #...:	1211559	**Analysis Time..:**	01:52		
Dilution Factor:	5				
Analyst ID.....:	356074	**Instrument ID..:**	G02		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C8-C9	ND	50	mg/kg	25
C10-C11	**150**	**50**	**mg/kg**	**25**
C12-C13	**410**	**50**	**mg/kg**	**25**
C14-C15	**670**	**50**	**mg/kg**	**25**
C16-C17	**770**	**50**	**mg/kg**	**25**
C18-C19	**500**	**50**	**mg/kg**	**25**
C20-C23	**220**	**50**	**mg/kg**	**25**
C24-C27	**51**	**50**	**mg/kg**	**25**
C28-C31	ND	50	mg/kg	25
C32-C35	ND	50	mg/kg	25
C36-C39	ND	50	mg/kg	25
C40+	ND	50	mg/kg	25
Total Carbon Chain Range	**2800**	**50**	**mg/kg**	**25**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	87	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP_16_2

GC Volatiles

Lot-Sample #...:	E1G300190-012	**Work Order #...:**	EG6W81AE	**Matrix.....:**	SOLID
Date Sampled...:	07/30/01 16:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1212193
Prep Date.....:	07/30/01	**Analysis Date..:**	07/30/01		
Prep Batch #...:	1212357	**Analysis Time..:**	23:32		
Dilution Factor:	1				
Analyst ID.....:	001464	**Instrument ID..:**	G15		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	**0.66 J**	**1.0**	**mg/kg**	**0.10**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	85	(60 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

Unknown hydrocarbon pattern.

HALEY & ALDRICH INC

Client Sample ID: SP_16_2

GC/MS Volatiles

Lot-Sample #...:	E1G300190-012	**Work Order #...:**	EG6W81AF	**Matrix.....:**	SOLID
Date Sampled...:	07/30/01 16:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1212314
Prep Date.....:	07/31/01	**Analysis Date..:**	07/31/01		
Prep Batch #...:	1212600	**Analysis Time..:**	17:16		
Dilution Factor:	5				
Analyst ID.....:	015590	**Instrument ID..:**	MSD		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	50	ug/kg	5.0
Chloromethane	ND	50	ug/kg	15
Vinyl chloride	ND	50	ug/kg	10
Bromomethane	ND	50	ug/kg	10
1,2-Dibromoethane	ND	25	ug/kg	15
Chloroethane	ND	50	ug/kg	10
Trichlorofluoromethane	ND	50	ug/kg	10
Acrolein	ND	500	ug/kg	150
1,1-Dichloroethene	ND	25	ug/kg	10
Iodomethane	ND	50	ug/kg	25
Acetone	ND	120	ug/kg	75
Carbon disulfide	ND	25	ug/kg	10
Methylene chloride	ND	25	ug/kg	15
trans-1,2-Dichloroethene	ND	25	ug/kg	10
Acrylonitrile	ND	500	ug/kg	150
Methyl tert-butyl ether	ND	25	ug/kg	5.0
1,1-Dichloroethane	ND	25	ug/kg	5.0
Vinyl acetate	ND	50	ug/kg	25
2,2-Dichloropropane	ND	25	ug/kg	10
cis-1,2-Dichloroethene	ND	25	ug/kg	10
2-Butanone	ND	120	ug/kg	75
Bromochloromethane	ND	25	ug/kg	5.0
Chloroform	ND	25	ug/kg	5.0
Tetrahydrofuran	ND	100	ug/kg	50
1,1,1-Trichloroethane	ND	25	ug/kg	5.0
1,1-Dichloropropene	ND	25	ug/kg	5.0
Carbon tetrachloride	ND	25	ug/kg	5.0
Benzene	ND	25	ug/kg	10
1,2-Dichloroethane	ND	25	ug/kg	5.0
Trichloroethene	ND	25	ug/kg	10
1,2-Dichloropropane	ND	25	ug/kg	5.0
Bromodichloromethane	ND	25	ug/kg	5.0
2-Chloroethyl vinyl ether	ND	50	ug/kg	25
cis-1,3-Dichloropropene	ND	25	ug/kg	5.0
4-Methyl-2-pentanone	ND	120	ug/kg	50
Toluene	ND	25	ug/kg	10
trans-1,3-Dichloropropene	ND	25	ug/kg	15

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SP_16_2

GC/MS Volatiles

Lot-Sample #...: E1G300190-012 Work Order #...: EG6W81AF Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	25	ug/kg	15
Tetrachloroethene	ND	25	ug/kg	10
2-Hexanone	ND	120	ug/kg	50
Dibromochloromethane	ND	25	ug/kg	25
Chlorobenzene	ND	25	ug/kg	10
Ethylbenzene	**83**	**25**	**ug/kg**	**10**
Xylenes (total)	**430**	**25**	**ug/kg**	**15**
Styrene	ND	50	ug/kg	10
Bromoform	ND	25	ug/kg	15
Isopropylbenzene	**34**	**25**	**ug/kg**	**10**
p-Isopropyltoluene	**77**	**25**	**ug/kg**	**10**
Bromobenzene	ND	25	ug/kg	10
1,1,1,2-Tetrachloroethane	ND	25	ug/kg	15
1,1,2,2-Tetrachloroethane	ND	25	ug/kg	15
1,2,3-Trichloropropane	ND	25	ug/kg	15
n-Propylbenzene	**93**	**25**	**ug/kg**	**10**
2-Chlorotoluene	ND	25	ug/kg	10
4-Chlorotoluene	ND	25	ug/kg	10
1,3,5-Trimethylbenzene	**180**	**25**	**ug/kg**	**10**
tert-Butylbenzene	ND	25	ug/kg	10
1,2,4-Trimethylbenzene	**530**	**25**	**ug/kg**	**10**
sec-Butylbenzene	**85**	**25**	**ug/kg**	**10**
1,3-Dichlorobenzene	ND	25	ug/kg	10
1,4-Dichlorobenzene	ND	25	ug/kg	10
1,2-Dichlorobenzene	ND	25	ug/kg	10
n-Butylbenzene	**120**	**25**	**ug/kg**	**10**
1,2-Dibromo-3-chloro-propane	ND	50	ug/kg	15
1,2,4-Trichloro-benzene	ND	25	ug/kg	10
Hexachlorobutadiene	ND	25	ug/kg	10
1,2,3-Trichlorobenzene	ND	25	ug/kg	10
t-Butanol	ND	500	ug/kg	250
Isopropyl ether	ND	50	ug/kg	5.0
Tert-amyl methyl ether	ND	50	ug/kg	10
Tert-butyl ethyl ether	ND	50	ug/kg	5.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	122	(70 - 130)
1,2-Dichloroethane-d4	99	(60 - 140)
Toluene-d8	102	(70 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP_16_2

HPLC

Lot-Sample #...:	E1G300190-012	**Work Order #...:**	EG6W81AG	**Matrix.....:**	SOLID
Date Sampled...:	07/30/01 16:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	
Prep Date.....:	07/31/01	**Analysis Date..:**	08/02/01		
Prep Batch #...:	1212425	**Analysis Time..:**	03:45		
Dilution Factor:	10				
Analyst ID.....:	057134	**Instrument ID..:**	LC7		
		Method.....:	SW846 8310		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	4000	ug/kg	630
Acenaphthylene	ND	2000	ug/kg	460
Anthracene	**82**	**80**	**ug/kg**	**11**
Benzo(a)anthracene	ND G	800	ug/kg	17
Benzo(a)pyrene	**130**	**100**	**ug/kg**	**31**
Benzo(b)fluoranthene	**200**	**40**	**ug/kg**	**24**
Benzo(ghi)perylene	ND G	500	ug/kg	31
Benzo(k)fluoranthene	ND	40	ug/kg	11
Chrysene	**320**	**200**	**ug/kg**	**140**
Dibenz(a,h)anthracene	ND	400	ug/kg	92
Fluoranthene	ND G	2500	ug/kg	48
Fluorene	**440**	**400**	**ug/kg**	**67**
Indeno(1,2,3-cd)pyrene	ND	200	ug/kg	31
Naphthalene	**1300 J**	**2000**	**ug/kg**	**230**
Phenanthrene	**1900**	**160**	**ug/kg**	**26**
Pyrene	ND	400	ug/kg	110

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	0.0 SRD	(41 - 115)

NOTE(S):

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_16_1

TOTAL Metals

Lot-Sample #...: E1G300190-011 Matrix.....: SOLID
Date Sampled...: 07/30/01 16:00 Date Received..: 07/30/01 17:45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1212356						
Aluminum	**18400**	**20.0**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W71AH**
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 8.0	
Arsenic	**4.3**	**1.0**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W71AJ**
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	07/31/01	EG6W71AK
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.60	
Barium	**115**	**2.0**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W71AL**
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.10	
Cadmium	**0.58**	**0.50**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W71AM**
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.060	
Chromium	**24.0**	**1.0**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W71AN**
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.10	
Beryllium	**0.59**	**0.50**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W71AP**
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.050	
Lead	**4.4**	**0.50**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W71AQ**
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	07/31/01	EG6W71AR
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	07/31/01	EG6W71AT
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.10	

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HALEY & ALDRICH INC

Client Sample ID: SP_16_1

TOTAL Metals

Lot-Sample #...: E1G300190-011 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	8.6	5.0	mg/kg	SW846 6010B	07/31/01	EG6W71AU
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.10	
Copper	21.4	2.5	mg/kg	SW846 6010B	07/31/01	EG6W71AV
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.40	
Molybdenum	0.46 B	4.0	mg/kg	SW846 6010B	07/31/01	EG6W71AW
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.30	
Nickel	15.8	4.0	mg/kg	SW846 6010B	07/31/01	EG6W71AX
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	07/31/01	EG6W71A0
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.80	
Vanadium	48.5	5.0	mg/kg	SW846 6010B	07/31/01	EG6W71A1
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.10	
Zinc	55.0	2.0	mg/kg	SW846 6010B	07/31/01	EG6W71AA
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 1.0	
Prep Batch #...: 1212361						
Mercury	0.058 B	0.10	mg/kg	SW846 7471A	07/31/01	EG6W71AC
		Dilution Factor: 1		Analysis Time..: 18:11	Analyst ID.....: 0210882	
		Instrument ID..: M04		MS Run #.....: 1212195	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_16_2

TOTAL Metals

Lot-Sample #...: E1G300190-012 Matrix.....: SOLID
Date Sampled...: 07/30/01 16:00 Date Received..: 07/30/01 17:45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1212356						
Aluminum	**24200**	**20.0**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W81AH**
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 8.0	
Arsenic	**5.1**	**1.0**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W81AJ**
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	07/31/01	EG6W81AK
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.60	
Barium	**145**	**2.0**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W81AL**
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.10	
Cadmium	**0.96**	**0.50**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W81AM**
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.060	
Chromium	**28.5**	**1.0**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W81AN**
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.10	
Beryllium	**0.74**	**0.50**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W81AP**
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.050	
Lead	**6.0**	**0.50**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG6W81AQ**
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	07/31/01	EG6W81AR
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	07/31/01	EG6W81AT
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.10	

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HALEY & ALDRICH INC

Client Sample ID: SP_16_2

TOTAL Metals

Lot-Sample #...: E1G300190-012 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	12.1	5.0	mg/kg	SW846 6010B	07/31/01	EG6W81AU
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.10	
Copper	29.8	2.5	mg/kg	SW846 6010B	07/31/01	EG6W81AV
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.40	
Molybdenum	ND	4.0	mg/kg	SW846 6010B	07/31/01	EG6W81AW
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.30	
Nickel	19.9	4.0	mg/kg	SW846 6010B	07/31/01	EG6W81AX
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	07/31/01	EG6W81A0
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.80	
Vanadium	60.9	5.0	mg/kg	SW846 6010B	07/31/01	EG6W81A1
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 0.10	
Zinc	73.3	2.0	mg/kg	SW846 6010B	07/31/01	EG6W81AA
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 0210882	
		Instrument ID..: M01		MS Run #.....: 1212192	MDL.....: 1.0	
Prep Batch #...: 1212361						
Mercury	0.050 B	0.10	mg/kg	SW846 7471A	07/31/01	EG6W81AC
		Dilution Factor: 1		Analysis Time..: 18:16	Analyst ID.....: 0210882	
		Instrument ID..: M04		MS Run #.....: 1212195	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

QC DATA ASSOCIATION SUMMARY

E1G300190

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 7471A		1212361	1212195
	SOLID	SW846 8260B		1212600	1212314
	SOLID	SW846 6010B		1212356	1212192
	SOLID	SW846 8310		1212425	
002	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 7471A		1212361	1212195
	SOLID	SW846 8260B		1212600	1212314
	SOLID	SW846 6010B		1212356	1212192
	SOLID	SW846 8310		1212425	
003	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 7471A		1212361	1212195
	SOLID	SW846 8260B		1212600	1212314
	SOLID	SW846 6010B		1212356	1212192
	SOLID	SW846 8310		1212425	
004	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 7471A		1212361	1212195
	SOLID	SW846 8260B		1212600	1212314
	SOLID	SW846 6010B		1212356	1212192
	SOLID	SW846 8310		1212425	
005	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 7471A		1212361	1212195
	SOLID	SW846 8260B		1212600	1212314
	SOLID	SW846 6010B		1212356	1212192
	SOLID	SW846 8310		1212425	
006	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 8260B		1212600	1212314
007	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 8260B		1212600	1212314

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QC DATA ASSOCIATION SUMMARY

E1G300190

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
008	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 8260B		1212600	1212314
009	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 8260B		1212600	1212314
010	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 8260B		1213194	1213083
	SOLID	SW846 8310		1214378	
011	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 7471A		1212361	1212195
	SOLID	SW846 8260B		1212600	1212314
	SOLID	SW846 6010B		1212356	1212192
	SOLID	SW846 8310		1212425	
012	SOLID	SW846 8015B		1211559	1211297
	SOLID	SW846 8015B		1212357	1212193
	SOLID	SW846 7471A		1212361	1212195
	SOLID	SW846 8260B		1212600	1212314
	SOLID	SW846 6010B		1212356	1212192
	SOLID	SW846 8310		1212425	

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E1G300190 **Work Order #...:** EG60F1AA **Matrix.....:** SOLID
MB Lot-Sample #: E1G300000-559

Prep Date.....: 07/30/01 **Analysis Time..:** 14:14
Analysis Date..: 07/31/01 **Prep Batch #...:** 1211559 **Instrument ID..:** G02
Dilution Factor: 1

Analyst ID.....: 356074

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
C8-C9	ND	10	mg/kg	SW846 8015B
C10-C11	ND	10	mg/kg	SW846 8015B
C12-C13	ND	10	mg/kg	SW846 8015B
C14-C15	ND	10	mg/kg	SW846 8015B
C16-C17	ND	10	mg/kg	SW846 8015B
C18-C19	ND	10	mg/kg	SW846 8015B
C20-C23	ND	10	mg/kg	SW846 8015B
C24-C27	ND	10	mg/kg	SW846 8015B
C28-C31	ND	10	mg/kg	SW846 8015B
C32-C35	ND	10	mg/kg	SW846 8015B
C36-C39	ND	10	mg/kg	SW846 8015B
C40+	ND	10	mg/kg	SW846 8015B
Total Carbon Chain Range	ND	10	mg/kg	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	104	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E1G300190
MB Lot-Sample #: E1G310000-357

Analysis Date..: 07/30/01
Dilution Factor: 1

Work Order #...: EG7081AA

Prep Date.....: 07/30/01
Prep Batch #...: 1212357

Analyst ID.....: 001464

Matrix.....: SOLID

Analysis Time..: 16:34
Instrument ID..: G15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
C6-C8	ND	1.0	mg/kg	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	87	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: E1G300190 **Work Order #...:** EG8CM1AA **Matrix.....:** SOLID
MB Lot-Sample #: G1G310000-425

Prep Date.....: 07/31/01 **Analysis Time..:** 17:25
Analysis Date..: 08/01/01 **Prep Batch #...:** 1212425 **Instrument ID..:** LC7
Dilution Factor: 1

Analyst ID.....: 057134

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	400	ug/kg	SW846 8310
Acenaphthylene	ND	200	ug/kg	SW846 8310
Anthracene	ND	8.0	ug/kg	SW846 8310
Benzo(a)anthracene	ND	16	ug/kg	SW846 8310
Benzo(a)pyrene	ND	10	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	4.0	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	16	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	4.0	ug/kg	SW846 8310
Chrysene	ND	20	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	40	ug/kg	SW846 8310
Fluoranthene	ND	20	ug/kg	SW846 8310
Fluorene	ND	40	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg	SW846 8310
Naphthalene	ND	200	ug/kg	SW846 8310
Phenanthrene	ND	16	ug/kg	SW846 8310
Pyrene	ND	40	ug/kg	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	15 *	(41 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

* Surrogate recovery is outside stated control limits.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1G300190 **Work Order #...:** EG8WD1AA **Matrix.....:** SOLID
MB Lot-Sample #: E1G310000-600

Prep Date.....: 07/31/01 **Analysis Time..:** 10:08
Analysis Date..: 07/31/01 **Prep Batch #...:** 1212600 **Instrument ID..:** MSD
Dilution Factor: 1

Analyst ID.....: 015590

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1G300190 **Work Order #...:** EG8WD1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(70 - 130)
1,2-Dichloroethane-d4	104	(60 - 140)
Toluene-d8	104	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1G300190 **Work Order #...:** EG88F1AA **Matrix.....:** SOLID
MB Lot-Sample #: E1H010000-194

Prep Date.....: 07/30/01 **Analysis Time..:** 16:04
Analysis Date..: 07/31/01 **Prep Batch #...:** 1213194 **Instrument ID..:** MSG
Dilution Factor: 1

Analyst ID.....: 999998

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	500	ug/kg	SW846 8260B
Chloromethane	ND	500	ug/kg	SW846 8260B
Vinyl chloride	ND	500	ug/kg	SW846 8260B
Bromomethane	ND	500	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	250	ug/kg	SW846 8260B
Chloroethane	ND	500	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	500	ug/kg	SW846 8260B
Acrolein	ND	5000	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846 8260B
Iodomethane	ND	500	ug/kg	SW846 8260B
Acetone	ND	1200	ug/kg	SW846 8260B
Carbon disulfide	ND	250	ug/kg	SW846 8260B
Methylene chloride	ND	250	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
Acrylonitrile	ND	5000	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846 8260B
Vinyl acetate	ND	500	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
2-Butanone	ND	1200	ug/kg	SW846 8260B
Bromochloromethane	ND	250	ug/kg	SW846 8260B
Chloroform	ND	250	ug/kg	SW846 8260B
Tetrahydrofuran	ND	1000	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	250	ug/kg	SW846 8260B
Carbon tetrachloride	ND	250	ug/kg	SW846 8260B
Benzene	ND	250	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846 8260B
Trichloroethene	ND	250	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
Bromodichloromethane	ND	250	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	500	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	1200	ug/kg	SW846 8260B
Toluene	ND	250	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	250	ug/kg	SW846 8260B
Tetrachloroethene	ND	250	ug/kg	SW846 8260B
2-Hexanone	ND	1200	ug/kg	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1G300190 **Work Order #...:** EG88F1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromochloromethane	ND	250	ug/kg	SW846 8260B
Chlorobenzene	ND	250	ug/kg	SW846 8260B
Ethylbenzene	ND	250	ug/kg	SW846 8260B
Xylenes (total)	ND	250	ug/kg	SW846 8260B
Styrene	ND	500	ug/kg	SW846 8260B
Bromoform	ND	250	ug/kg	SW846 8260B
Isopropylbenzene	ND	250	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	250	ug/kg	SW846 8260B
Bromobenzene	ND	250	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	250	ug/kg	SW846 8260B
n-Propylbenzene	ND	250	ug/kg	SW846 8260B
2-Chlorotoluene	ND	250	ug/kg	SW846 8260B
4-Chlorotoluene	ND	250	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
tert-Butylbenzene	ND	250	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
sec-Butylbenzene	ND	250	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
n-Butylbenzene	ND	250	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	500	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	250	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	250	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	250	ug/kg	SW846 8260B
t-Butanol	ND	5000	ug/kg	SW846 8260B
Isopropyl ether	ND	500	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	500	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	500	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	89	(60 - 140)
1,2-Dichloroethane-d4	91	(60 - 140)
Toluene-d8	94	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: E1G300190 **Work Order #...:** EHDQ11AA **Matrix.....:** SOLID
MB Lot-Sample #: G1H020000-378

Prep Date.....: 08/02/01 **Analysis Time..:** 20:11
Analysis Date..: 08/02/01 **Prep Batch #...:** 1214378 **Instrument ID..:** LC7
Dilution Factor: 1

Analyst ID.....: 057134

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	400	ug/kg	SW846 8310
Acenaphthylene	ND	200	ug/kg	SW846 8310
Anthracene	ND	20	ug/kg	SW846 8310
Benzo(a)anthracene	ND	250	ug/kg	SW846 8310
Benzo(a)pyrene	ND	10	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	10	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	16	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	4.0	ug/kg	SW846 8310
Chrysene	ND	20	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	40	ug/kg	SW846 8310
Fluoranthene	ND	100	ug/kg	SW846 8310
Fluorene	ND	40	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg	SW846 8310
Naphthalene	ND	200	ug/kg	SW846 8310
Phenanthrene	ND	1600	ug/kg	SW846 8310
Pyrene	ND	300	ug/kg	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	84	(41 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E1G310000-356 **Prep Batch #...:** 1212356						
Aluminum	ND	20.0	mg/kg	SW846 6010B	07/31/01	EG7061AA
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	07/31/01	EG7061AC
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	07/31/01	EG7061AD
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	ND	2.0	mg/kg	SW846 6010B	07/31/01	EG7061AE
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	ND	0.50	mg/kg	SW846 6010B	07/31/01	EG7061AF
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	**0.15 B**	**1.0**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG7061AG**
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	ND	0.50	mg/kg	SW846 6010B	07/31/01	EG7061AH
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	ND	0.50	mg/kg	SW846 6010B	07/31/01	EG7061AJ
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	07/31/01	EG7061AK
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	07/31/01	EG7061AL
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	07/31/01	EG7061AM
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	**0.43 B**	**2.5**	**mg/kg**	**SW846 6010B**	**07/31/01**	**EG7061AN**
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	ND	4.0	mg/kg	SW846 6010B	07/31/01	EG7061AP
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B	07/31/01	EG7061AQ
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B	07/31/01	EG7061AR
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B	07/31/01	EG7061AT
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B	07/31/01	EG7061AU
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 021088	Instrument ID..: M01	

MB Lot-Sample #: E1G310000-361 **Prep Batch #...:** 1212361

Mercury	ND	0.10	mg/kg	SW846 7471A	07/31/01	EG71J1AA
		Dilution Factor: 1				
		Analysis Time..: 17:55		Analyst ID.....: 021088	Instrument ID..: M04	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: E1G300190 **Work Order #...:** EG8CM1AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: G1G310000-425 EG8CM1AD-LCSD
Prep Date.....: 07/31/01 **Analysis Date..:** 08/01/01
Prep Batch #...: 1212425 **Analysis Time..:** 18:00
Dilution Factor: 1 **Instrument ID..:** LC7
Analyst ID.....: 057134

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acenaphthene	1330	134 a	ug/kg	10		SW846 8310
	1330	1200 p	ug/kg	90	160	SW846 8310
Acenaphthylene	667	420	ug/kg	63		SW846 8310
	667	609	ug/kg	91	37	SW846 8310
Anthracene	26.6	21.2	ug/kg	80		SW846 8310
	26.6	23.5	ug/kg	88	10	SW846 8310
Benzo(a)anthracene	66.7	62.6	ug/kg	94		SW846 8310
	66.7	65.7	ug/kg	98	4.8	SW846 8310
Benzo(a)pyrene	**66.7**	**57.9**	**ug/kg**	**87**		**SW846 8310**
	66.7	**58.3**	**ug/kg**	**87**	**0.63**	**SW846 8310**
Benzo(b)fluoranthene	26.6	23.8	ug/kg	90		SW846 8310
	26.6	25.2	ug/kg	95	5.7	SW846 8310
Benzo(ghi)perylene	106	83.1	ug/kg	78		SW846 8310
	106	92.1	ug/kg	87	10	SW846 8310
Benzo(k)fluoranthene	26.6	24.0	ug/kg	90		SW846 8310
	26.6	25.0	ug/kg	94	3.8	SW846 8310
Chrysene	66.7	62.5	ug/kg	94		SW846 8310
	66.7	65.5	ug/kg	98	4.6	SW846 8310
Dibenz(a,h)anthracene	266	232	ug/kg	87		SW846 8310
	266	246	ug/kg	92	5.9	SW846 8310
Fluoranthene	66.7	57.6	ug/kg	86		SW846 8310
	66.7	61.3	ug/kg	92	6.2	SW846 8310
Fluorene	**133**	**63.1**	**ug/kg**	**47**		**SW846 8310**
	133	**122 p**	**ug/kg**	**92**	**64**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**66.7**	**58.6**	**ug/kg**	**88**		**SW846 8310**
	66.7	**61.9**	**ug/kg**	**93**	**5.5**	**SW846 8310**
Naphthalene	**667**	**65.8 a**	**ug/kg**	**9.9**		**SW846 8310**
	667	**594 p**	**ug/kg**	**89**	**160**	**SW846 8310**
Phenanthrene	53.2	45.1	ug/kg	85		SW846 8310
	53.2	48.6	ug/kg	91	7.3	SW846 8310
Pyrene	**133**	**119**	**ug/kg**	**90**		**SW846 8310**
	133	**126**	**ug/kg**	**94**	**5.1**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	6.9 *	(41 - 115)
	78	(41 - 115)

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: E1G300190 **Work Order #...:** EG8CM1AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: G1G310000-425 EG8CM1AD-LCSD

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: E1G300190 **Work Order #...:** EHDQ11AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: G1H020000-378 EHDQ11AD-LCSD
Prep Date.....: 08/02/01 **Analysis Date..:** 08/02/01
Prep Batch #...: 1214378 **Analysis Time..:** 20:45
Dilution Factor: 1 **Instrument ID..:** LC7
Analyst ID.....: 057134

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acenaphthene	1330	1270	ug/kg	96		SW846 8310
	1330	818	ug/kg	62	43	SW846 8310
Acenaphthylene	667	657	ug/kg	99		SW846 8310
	667	499	ug/kg	75	27	SW846 8310
Anthracene	26.6	24.2	ug/kg	91		SW846 8310
	26.6	17.8	ug/kg	67	31	SW846 8310
Benzo(a)anthracene	66.7	68.2	ug/kg	102		SW846 8310
	66.7	49.4	ug/kg	74	32	SW846 8310
Benzo(a)pyrene	**66.7**	**59.0**	**ug/kg**	**88**		**SW846 8310**
	66.7	**40.6**	**ug/kg**	**61**	**37**	**SW846 8310**
Benzo(b)fluoranthene	26.6	25.1	ug/kg	94		SW846 8310
	26.6	17.1	ug/kg	64	38	SW846 8310
Benzo(ghi)perylene	106	99.1	ug/kg	93		SW846 8310
	106	65.6	ug/kg	62	41	SW846 8310
Benzo(k)fluoranthene	26.6	25.0	ug/kg	94		SW846 8310
	26.6	16.6	ug/kg	62	40	SW846 8310
Chrysene	66.7	67.0	ug/kg	100		SW846 8310
	66.7	48.3	ug/kg	72	32	SW846 8310
Dibenz(a,h)anthracene	266	253	ug/kg	95		SW846 8310
	266	140 p	ug/kg	53	57	SW846 8310
Fluoranthene	66.7	62.2	ug/kg	93		SW846 8310
	66.7	45.9	ug/kg	69	30	SW846 8310
Fluorene	**133**	**126**	**ug/kg**	**95**		**SW846 8310**
	133	**87.8**	**ug/kg**	**66**	**36**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**66.7**	**63.7**	**ug/kg**	**96**		**SW846 8310**
	66.7	**40.4**	**ug/kg**	**60**	**45**	**SW846 8310**
Naphthalene	**667**	**616**	**ug/kg**	**92**		**SW846 8310**
	667	**425**	**ug/kg**	**64**	**37**	**SW846 8310**
Phenanthrene	53.2	49.7	ug/kg	93		SW846 8310
	53.2	36.1	ug/kg	68	32	SW846 8310
Pyrene	**133**	**126**	**ug/kg**	**95**		**SW846 8310**
	133	**97.3**	**ug/kg**	**73**	**26**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	82	(41 - 115)
	63	(41 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: E1G300190 **Work Order #...:** EG8CM1AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: G1G310000-425 EG8CM1AD-LCSD
Prep Date.....: 07/31/01 **Analysis Date..:** 08/01/01
Prep Batch #...: 1212425 **Analysis Time..:** 18:00
Dilution Factor: 1 **Instrument ID..:** LC7
Analyst ID.....: 057134

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	10 a	(50 - 150)			SW846 8310
	90 p	(50 - 150)	160	(0-50)	SW846 8310
Acenaphthylene	63	(50 - 150)			SW846 8310
	91	(50 - 150)	37	(0-50)	SW846 8310
Anthracene	80	(50 - 150)			SW846 8310
	88	(50 - 150)	10	(0-50)	SW846 8310
Benzo(a)anthracene	94	(50 - 150)			SW846 8310
	98	(50 - 150)	4.8	(0-50)	SW846 8310
Benzo(a)pyrene	**87**	**(49 - 107)**			**SW846 8310**
	87	**(49 - 107)**	**0.63**	**(0-53)**	**SW846 8310**
Benzo(b)fluoranthene	90	(50 - 150)			SW846 8310
	95	(50 - 150)	5.7	(0-50)	SW846 8310
Benzo(ghi)perylene	78	(50 - 150)			SW846 8310
	87	(50 - 150)	10	(0-50)	SW846 8310
Benzo(k)fluoranthene	90	(50 - 150)			SW846 8310
	94	(50 - 150)	3.8	(0-50)	SW846 8310
Chrysene	94	(50 - 150)			SW846 8310
	98	(50 - 150)	4.6	(0-50)	SW846 8310
Dibenz(a,h)anthracene	87	(50 - 150)			SW846 8310
	92	(50 - 150)	5.9	(0-50)	SW846 8310
Fluoranthene	86	(50 - 150)			SW846 8310
	92	(50 - 150)	6.2	(0-50)	SW846 8310
Fluorene	**47**	**(43 - 112)**			**SW846 8310**
	92 p	**(43 - 112)**	**64**	**(0-56)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**88**	**(54 - 114)**			**SW846 8310**
	93	**(54 - 114)**	**5.5**	**(0-51)**	**SW846 8310**
Naphthalene	**9.9 a**	**(44 - 110)**			**SW846 8310**
	89 p	**(44 - 110)**	**160**	**(0-50)**	**SW846 8310**
Phenanthrene	85	(50 - 150)			SW846 8310
	91	(50 - 150)	7.3	(0-50)	SW846 8310
Pyrene	**90**	**(49 - 115)**			**SW846 8310**
	94	**(49 - 115)**	**5.1**	**(0-54)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	6.9 *	(41 - 115)
	78	(41 - 115)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: E1G300190 **Work Order #...:** EG8CM1AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: G1G310000-425 EG8CM1AD-LCSD

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: E1G300190 **Work Order #...:** EHDQ11AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: G1H020000-378 EHDQ11AD-LCSD
Prep Date.....: 08/02/01 **Analysis Date..:** 08/02/01
Prep Batch #...: 1214378 **Analysis Time..:** 20:45
Dilution Factor: 1 **Instrument ID..:** LC7
Analyst ID.....: 057134

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	96	(50 - 150)			SW846 8310
	62	(50 - 150)	43	(0-50)	SW846 8310
Acenaphthylene	99	(50 - 150)			SW846 8310
	75	(50 - 150)	27	(0-50)	SW846 8310
Anthracene	91	(50 - 150)			SW846 8310
	67	(50 - 150)	31	(0-50)	SW846 8310
Benzo(a)anthracene	102	(50 - 150)			SW846 8310
	74	(50 - 150)	32	(0-50)	SW846 8310
Benzo(a)pyrene	**88**	**(49 - 107)**			**SW846 8310**
	61	**(49 - 107)**	**37**	**(0-53)**	**SW846 8310**
Benzo(b)fluoranthene	94	(50 - 150)			SW846 8310
	64	(50 - 150)	38	(0-50)	SW846 8310
Benzo(ghi)perylene	93	(50 - 150)			SW846 8310
	62	(50 - 150)	41	(0-50)	SW846 8310
Benzo(k)fluoranthene	94	(50 - 150)			SW846 8310
	62	(50 - 150)	40	(0-50)	SW846 8310
Chrysene	100	(50 - 150)			SW846 8310
	72	(50 - 150)	32	(0-50)	SW846 8310
Dibenz(a,h)anthracene	95	(50 - 150)			SW846 8310
	53 p	(50 - 150)	57	(0-50)	SW846 8310
Fluoranthene	93	(50 - 150)			SW846 8310
	69	(50 - 150)	30	(0-50)	SW846 8310
Fluorene	**95**	**(43 - 112)**			**SW846 8310**
	66	**(43 - 112)**	**36**	**(0-56)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**96**	**(54 - 114)**			**SW846 8310**
	60	**(54 - 114)**	**45**	**(0-51)**	**SW846 8310**
Naphthalene	**92**	**(44 - 110)**			**SW846 8310**
	64	**(44 - 110)**	**37**	**(0-50)**	**SW846 8310**
Phenanthrene	93	(50 - 150)			SW846 8310
	68	(50 - 150)	32	(0-50)	SW846 8310
Pyrene	**95**	**(49 - 115)**			**SW846 8310**
	73	**(49 - 115)**	**26**	**(0-54)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	82	(41 - 115)
	63	(41 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E1G300190 **Work Order #...:** EG60F1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1G300000-559
Prep Date.....: 07/30/01 **Analysis Date..:** 07/31/01
Prep Batch #...: 1211559 **Analysis Time..:** 14:53
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Diesel)	**250**	**239**	**mg/kg**	**95**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	103	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E1G300190 **Work Order #...:** EG7081AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1G310000-357
Prep Date.....: 07/30/01 **Analysis Date..:** 07/30/01
Prep Batch #...: 1212357 **Analysis Time..:** 16:08
Dilution Factor: 1 **Instrument ID..:** G15
Analyst ID.....: 001464

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Gasoline)	**5.00**	**5.55**	**mg/kg**	**111**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	118	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E1G300190 **Work Order #...:** EG8WD1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1G310000-600
Prep Date.....: 07/31/01 **Analysis Date..:** 07/31/01
Prep Batch #...: 1212600 **Analysis Time..:** 09:37
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 015590

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	**50.0**	**58.6**	**ug/kg**	**117**	**SW846 8260B**
Benzene	**50.0**	**58.9**	**ug/kg**	**118**	**SW846 8260B**
Trichloroethene	**50.0**	**51.0**	**ug/kg**	**102**	**SW846 8260B**
Toluene	**50.0**	**50.5**	**ug/kg**	**101**	**SW846 8260B**
Chlorobenzene	**50.0**	**48.7**	**ug/kg**	**97**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	105	(70 - 130)
1,2-Dichloroethane-d4	121	(60 - 140)
Toluene-d8	107	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E1G300190 **Work Order #...:** EG88F1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H010000-194
Prep Date.....: 07/30/01 **Analysis Date..:** 07/31/01
Prep Batch #...: 1213194 **Analysis Time..:** 14:07
Dilution Factor: 1 **Instrument ID..:** MSG
Analyst ID.....: 999998

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	**2500**	**2910**	**ug/kg**	**116**	**SW846 8260B**
Benzene	**2500**	**2580**	**ug/kg**	**103**	**SW846 8260B**
Trichloroethene	**2500**	**2680**	**ug/kg**	**107**	**SW846 8260B**
Toluene	**2500**	**2500**	**ug/kg**	**100**	**SW846 8260B**
Chlorobenzene	**2500**	**2440**	**ug/kg**	**97**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(60 - 140)
1,2-Dichloroethane-d4	105	(60 - 140)
Toluene-d8	107	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID

LCS Lot-Sample#: E1G310000-356 **Prep Batch #...:** 1212356

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Aluminum	200	163	mg/kg	82	SW846 6010B	07/31/01	EG7061AV
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	200	180	mg/kg	90	SW846 6010B	07/31/01	EG7061AW
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	50.0	40.8	mg/kg	82	SW846 6010B	07/31/01	EG7061AX
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	200	196	mg/kg	98	SW846 6010B	07/31/01	EG7061A0
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	5.00	5.00	mg/kg	100	SW846 6010B	07/31/01	EG7061A1
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	20.0	20.8	mg/kg	104	SW846 6010B	07/31/01	EG7061A2
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	5.00	5.20	mg/kg	104	SW846 6010B	07/31/01	EG7061A3
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	50.0	44.8	mg/kg	90	SW846 6010B	07/31/01	EG7061A4
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	200	171	mg/kg	86	SW846 6010B	07/31/01	EG7061A5
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Silver	5.00	4.44	mg/kg	89	SW846 6010B	07/31/01	EG7061A6
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	50.0	50.2	mg/kg	100	SW846 6010B	07/31/01	EG7061A7
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Copper	25.0	24.1	mg/kg	97	SW846 6010B	07/31/01	EG7061A8
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	100	96.7	mg/kg	97	SW846 6010B	07/31/01	EG7061A9
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	50.0	49.9	mg/kg	100	SW846 6010B	07/31/01	EG7061CA
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	200	177	mg/kg	88	SW846 6010B	07/31/01	EG7061CC
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	50.0	50.4	mg/kg	101	SW846 6010B	07/31/01	EG7061CD
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	50.0	49.0	mg/kg	98	SW846 6010B	07/31/01	EG7061CE
			Dilution Factor: 1				
			Analysis Time..: 17:16		Analyst ID.....: 021088	Instrument ID..: M01	

LCS Lot-Sample#: E1G310000-361 **Prep Batch #...:** 1212361

Mercury	0.833	0.825	mg/kg	99	SW846 7471A	07/31/01	EG71J1AC
			Dilution Factor: 1				
			Analysis Time..: 17:56		Analyst ID.....: 021088	Instrument ID..: M04	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E1G300190 **Work Order #...:** EG60F1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1G300000-559
Prep Date.....: 07/30/01 **Analysis Date..:** 07/31/01
Prep Batch #...: 1211559 **Analysis Time..:** 14:53
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**95**	**(60 - 130)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	103	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E1G300190 **Work Order #...:** EG7081AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1G310000-357
Prep Date.....: 07/30/01 **Analysis Date..:** 07/30/01
Prep Batch #...: 1212357 **Analysis Time..:** 16:08
Dilution Factor: 1 **Instrument ID..:** G15
Analyst ID.....: 001464

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Gasoline)	**111**	**(80 - 140)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	118	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E1G300190 **Work Order #...:** EG8WD1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1G310000-600
Prep Date.....: 07/31/01 **Analysis Date..:** 07/31/01
Prep Batch #...: 1212600 **Analysis Time..:** 09:37
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 015590

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	**117**	**(60 - 150)**	**SW846 8260B**
Benzene	**118**	**(70 - 140)**	**SW846 8260B**
Trichloroethene	**102**	**(70 - 130)**	**SW846 8260B**
Toluene	**101**	**(70 - 130)**	**SW846 8260B**
Chlorobenzene	**97**	**(70 - 130)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	105	(70 - 130)
1,2-Dichloroethane-d4	121	(60 - 140)
Toluene-d8	107	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E1G300190 **Work Order #...:** EG88F1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H010000-194
Prep Date.....: 07/30/01 **Analysis Date..:** 07/31/01
Prep Batch #...: 1213194 **Analysis Time..:** 14:07
Dilution Factor: 1 **Instrument ID..:** MSG
Analyst ID.....: 999998

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	**116**	**(60 - 140)**	**SW846 8260B**
Benzene	**103**	**(60 - 130)**	**SW846 8260B**
Trichloroethene	**107**	**(60 - 140)**	**SW846 8260B**
Toluene	**100**	**(60 - 130)**	**SW846 8260B**
Chlorobenzene	**97**	**(60 - 130)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(60 - 140)
1,2-Dichloroethane-d4	105	(60 - 140)
Toluene-d8	107	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E1G310000-356 **Prep Batch #...:** 1212356					
Aluminum	82	(80 - 120)	SW846 6010B	07/31/01	EG7061AV
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Arsenic	90	(75 - 115)	SW846 6010B	07/31/01	EG7061AW
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Antimony	82	(75 - 115)	SW846 6010B	07/31/01	EG7061AX
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Barium	98	(80 - 120)	SW846 6010B	07/31/01	EG7061A0
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Cadmium	100	(80 - 120)	SW846 6010B	07/31/01	EG7061A1
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Chromium	104	(85 - 120)	SW846 6010B	07/31/01	EG7061A2
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Beryllium	104	(80 - 120)	SW846 6010B	07/31/01	EG7061A3
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Lead	90	(80 - 120)	SW846 6010B	07/31/01	EG7061A4
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Selenium	86	(70 - 115)	SW846 6010B	07/31/01	EG7061A5
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Silver	89	(80 - 120)	SW846 6010B	07/31/01	EG7061A6
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	100	(80 - 120)	SW846 6010B	07/31/01	EG7061A7
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Copper	97	(80 - 120)	SW846 6010B	07/31/01	EG7061A8
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Molybdenum	97	(80 - 120)	SW846 6010B	07/31/01	EG7061A9
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Nickel	100	(80 - 120)	SW846 6010B	07/31/01	EG7061CA
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Thallium	88	(75 - 120)	SW846 6010B	07/31/01	EG7061CC
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Vanadium	101	(80 - 120)	SW846 6010B	07/31/01	EG7061CD
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01
Zinc	98	(80 - 120)	SW846 6010B	07/31/01	EG7061CE
		Dilution Factor: 1			
		Analysis Time..: 17:16	Analyst ID.....: 021088		Instrument ID..: M01

LCS Lot-Sample#: E1G310000-361 **Prep Batch #...:** 1212361

Mercury	99	(85 - 115)	SW846 7471A	07/31/01	EG71J1AC
		Dilution Factor: 1			
		Analysis Time..: 17:56	Analyst ID.....: 021088		Instrument ID..: M04

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...:	E1G300190	**Work Order #...:**	EG21M1AG-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1G270145-002		EG21M1AH-MSD		
Date Sampled...:	07/25/01 12:35	**Date Received..:**	07/26/01 18:30	**MS Run #.....:**	1213083
Prep Date.....:	07/30/01	**Analysis Date..:**	07/31/01		
Prep Batch #...:	1213194	**Analysis Time..:**	22:18		
Dilution Factor:	1	**Analyst ID.....:**	999998	**Instrument ID..:**	MSG

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	**ND**	**2960**	**3320**	**ug/kg**	**112**		**SW846 8260B**
	ND	**2960**	**2970**	**ug/kg**	**100**	**11**	**SW846 8260B**
Benzene	**ND**	**2960**	**3000**	**ug/kg**	**101**		**SW846 8260B**
	ND	**2960**	**2650**	**ug/kg**	**90**	**12**	**SW846 8260B**
Trichloroethene	**ND**	**2960**	**3150**	**ug/kg**	**107**		**SW846 8260B**
	ND	**2960**	**2730**	**ug/kg**	**92**	**14**	**SW846 8260B**
Toluene	**ND**	**2960**	**2760**	**ug/kg**	**93**		**SW846 8260B**
	ND	**2960**	**2430**	**ug/kg**	**82**	**13**	**SW846 8260B**
Chlorobenzene	**ND**	**2960**	**2800**	**ug/kg**	**95**		**SW846 8260B**
	ND	**2960**	**2460**	**ug/kg**	**83**	**13**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	96	(60 - 140)
	90	(60 - 140)
1,2-Dichloroethane-d4	95	(60 - 140)
	87	(60 - 140)
Toluene-d8	102	(60 - 140)
	93	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID
Date Sampled...: 07/30/01 10:30 **Date Received..:** 07/30/01 17:45

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E1G300190-001 **Prep Batch #...:** 1212356									
Aluminum									
	13300	200	13100 NC	mg/kg			SW846 6010B	07/31/01	EG6WT1A2
	13300	200	13500 NC	mg/kg			SW846 6010B	07/31/01	EG6WT1A3
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						
Arsenic									
	2.9	200	176	mg/kg	86		SW846 6010B	07/31/01	EG6WT1A4
	2.9	200	180	mg/kg	89	2.3	SW846 6010B	07/31/01	EG6WT1A5
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						
Antimony									
	0.93	50.0	6.12 N	mg/kg	10		SW846 6010B	07/31/01	EG6WT1A6
	0.93	50.0	6.15 N	mg/kg	10	0.52	SW846 6010B	07/31/01	EG6WT1A7
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						
Barium									
	104	200	283	mg/kg	90		SW846 6010B	07/31/01	EG6WT1A8
	104	200	291	mg/kg	93	2.6	SW846 6010B	07/31/01	EG6WT1A9
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						
Cadmium									
	0.25	5.00	4.86	mg/kg	92		SW846 6010B	07/31/01	EG6WT1CA
	0.25	5.00	4.99	mg/kg	95	2.8	SW846 6010B	07/31/01	EG6WT1CC
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						
Chromium									
	16.8	20.0	36.3	mg/kg	97		SW846 6010B	07/31/01	EG6WT1CD
	16.8	20.0	36.2	mg/kg	97	0.28	SW846 6010B	07/31/01	EG6WT1CE
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID
Date Sampled...: 07/30/01 10:30 **Date Received..:** 07/30/01 17:45

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Beryllium									
	0.51	5.00	5.43	mg/kg	98		SW846 6010B	07/31/01	EG6WT1CF
	0.51	5.00	5.57	mg/kg	101	2.4	SW846 6010B	07/31/01	EG6WT1CG
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						
Lead									
	4.7	50.0	48.3	mg/kg	87		SW846 6010B	07/31/01	EG6WT1CH
	4.7	50.0	49.7	mg/kg	90	2.9	SW846 6010B	07/31/01	EG6WT1CJ
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						
Selenium									
	ND	200	169	mg/kg	84		SW846 6010B	07/31/01	EG6WT1CK
	ND	200	172	mg/kg	86	2.2	SW846 6010B	07/31/01	EG6WT1CL
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						
Silver									
	ND	5.00	4.06	mg/kg	81		SW846 6010B	07/31/01	EG6WT1CM
	ND	5.00	4.13	mg/kg	83	1.8	SW846 6010B	07/31/01	EG6WT1CN
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						
Cobalt									
	8.7	50.0	56.1	mg/kg	95		SW846 6010B	07/31/01	EG6WT1CP
	8.7	50.0	58.0	mg/kg	99	3.2	SW846 6010B	07/31/01	EG6WT1CQ
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						
Copper									
	15.4	25.0	38.4	mg/kg	92		SW846 6010B	07/31/01	EG6WT1CR
	15.4	25.0	39.2	mg/kg	95	2.2	SW846 6010B	07/31/01	EG6WT1CT
			Dilution Factor: 1						
			Analysis Time..: 17:46		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1212192						

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID
Date Sampled...: 07/30/01 10:30 **Date Received..:** 07/30/01 17:45

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Molybdenum									
	ND	100	81.8	mg/kg	82		SW846 6010B	07/31/01	EG6WT1CU
	ND	100	83.6	mg/kg	84	2.2	SW846 6010B	07/31/01	EG6WT1CV
				Dilution Factor: 1					
				Analysis Time..: 17:46		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1212192					
Nickel									
	12.7	50.0	59.7	mg/kg	94		SW846 6010B	07/31/01	EG6WT1CW
	12.7	50.0	60.8	mg/kg	96	1.8	SW846 6010B	07/31/01	EG6WT1CX
				Dilution Factor: 1					
				Analysis Time..: 17:46		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1212192					
Thallium									
	ND	200	179	mg/kg	90		SW846 6010B	07/31/01	EG6WT1C0
	ND	200	183	mg/kg	92	2.4	SW846 6010B	07/31/01	EG6WT1C1
				Dilution Factor: 1					
				Analysis Time..: 17:46		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1212192					
Vanadium									
	36.2	50.0	80.5	mg/kg	89		SW846 6010B	07/31/01	EG6WT1C2
	36.2	50.0	83.5	mg/kg	95	3.7	SW846 6010B	07/31/01	EG6WT1C3
				Dilution Factor: 1					
				Analysis Time..: 17:46		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1212192					
Zinc									
	33.8	50.0	79.0	mg/kg	90		SW846 6010B	07/31/01	EG6WT1C4
	33.8	50.0	81.0	mg/kg	94	2.4	SW846 6010B	07/31/01	EG6WT1C5
				Dilution Factor: 1					
				Analysis Time..: 17:46		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1212192					

MS Lot-Sample #: E1G300190-001 **Prep Batch #...:** 1212361

Mercury									
	0.026	0.167	0.208	mg/kg	109		SW846 7471A	07/31/01	EG6WT1C6
	0.026	0.167	0.190	mg/kg	98	9.2	SW846 7471A	07/31/01	EG6WT1C7
				Dilution Factor: 1					
				Analysis Time..: 18:00		Instrument ID..: M04		Analyst ID.....: 021088	
				MS Run #.....: 1212195					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...:	E1G300190	**Work Order #...:**	EG6WT1C8-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1G300190-001		EG6WT1C9-MSD		
Date Sampled...:	07/30/01 10:30	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1212314
Prep Date.....:	07/31/01	**Analysis Date..:**	07/31/01		
Prep Batch #...:	1212600	**Analysis Time..:**	14:02		
Dilution Factor:	1	**Analyst ID.....:**	015590	**Instrument ID..:**	MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	**ND**	**50.0**	**61.8**	**ug/kg**	**124**		**SW846 8260B**
	ND	**50.0**	**61.6**	**ug/kg**	**123**	**0.22**	**SW846 8260B**
Benzene	**ND**	**50.0**	**57.7**	**ug/kg**	**115**		**SW846 8260B**
	ND	**50.0**	**56.4**	**ug/kg**	**113**	**2.2**	**SW846 8260B**
Trichloroethene	**2.4**	**50.0**	**53.0**	**ug/kg**	**101**		**SW846 8260B**
	2.4	**50.0**	**51.7**	**ug/kg**	**99**	**2.5**	**SW846 8260B**
Toluene	**ND**	**50.0**	**52.4**	**ug/kg**	**105**		**SW846 8260B**
	ND	**50.0**	**49.9**	**ug/kg**	**100**	**4.8**	**SW846 8260B**
Chlorobenzene	**ND**	**50.0**	**45.8**	**ug/kg**	**92**		**SW846 8260B**
	ND	**50.0**	**45.0**	**ug/kg**	**90**	**1.7**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	116	(70 - 130)
	116	(70 - 130)
1,2-Dichloroethane-d4	106	(60 - 140)
	106	(60 - 140)
Toluene-d8	114	(70 - 130)
	113	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...:	E1G300190	**Work Order #...:**	EG6W31AE-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1G300190-007		EG6W31AF-MSD		
Date Sampled...:	07/30/01 15:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1212193
Prep Date.....:	07/30/01	**Analysis Date..:**	07/30/01		
Prep Batch #...:	1212357	**Analysis Time..:**	23:58		
Dilution Factor:	1	**Analyst ID.....:**	001464	**Instrument ID..:**	G15

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Gasoline)	**ND**	**5.00**	**5.78**	**mg/kg**	**116**		**SW846 8015B**
	ND	**5.00**	**6.33**	**mg/kg**	**127**	**9.1**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	119	(60 - 130)
	126	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...:	E1G300190	**Work Order #...:**	EG6W81A2-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1G300190-012		EG6W81A3-MSD		
Date Sampled...:	07/30/01 16:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1211297
Prep Date.....:	07/30/01	**Analysis Date..:**	08/01/01		
Prep Batch #...:	1211559	**Analysis Time..:**	02:31		
Dilution Factor:	5	**Analyst ID.....:**	356074	**Instrument ID..:**	G02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Diesel)	**3000**	**250**		**mg/kg**	**0.0**		**SW846 8015B**
	Qualifiers: NC,MSB						
	3000	**250**		**mg/kg**	**0.0**	**0.0**	**SW846 8015B**
	Qualifiers: NC,MSB						

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	91	(60 - 130)
	91	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	E1G300190	**Work Order #...:**	EG21M1AG-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1G270145-002		EG21M1AH-MSD		
Date Sampled...:	07/25/01 12:35	**Date Received..:**	07/26/01 18:30	**MS Run #.....:**	1213083
Prep Date.....:	07/30/01	**Analysis Date..:**	07/31/01		
Prep Batch #...:	1213194	**Analysis Time..:**	22:18		
Dilution Factor:	1	**Analyst ID.....:**	999998	**Instrument ID..:**	MSG

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**112**	**(60 - 140)**			**SW846 8260B**
	100	**(60 - 140)**	**11**	**(0-35)**	**SW846 8260B**
Benzene	**101**	**(60 - 130)**			**SW846 8260B**
	90	**(60 - 130)**	**12**	**(0-35)**	**SW846 8260B**
Trichloroethene	**107**	**(60 - 140)**			**SW846 8260B**
	92	**(60 - 140)**	**14**	**(0-35)**	**SW846 8260B**
Toluene	**93**	**(60 - 130)**			**SW846 8260B**
	82	**(60 - 130)**	**13**	**(0-35)**	**SW846 8260B**
Chlorobenzene	**95**	**(60 - 130)**			**SW846 8260B**
	83	**(60 - 130)**	**13**	**(0-35)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	96	(60 - 140)
	90	(60 - 140)
1,2-Dichloroethane-d4	95	(60 - 140)
	87	(60 - 140)
Toluene-d8	102	(60 - 140)
	93	(60 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID
Date Sampled...: 07/30/01 10:30 **Date Received..:** 07/30/01 17:45

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E1G300190-001 **Prep Batch #...:** 1212356							
Aluminum	NC	(80 - 120)			SW846 6010B	07/31/01	EG6WT1A2
	NC	(80 - 120)		(0-25)	SW846 6010B	07/31/01	EG6WT1A3
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Arsenic	86	(75 - 115)			SW846 6010B	07/31/01	EG6WT1A4
	89	(75 - 115)	2.3	(0-25)	SW846 6010B	07/31/01	EG6WT1A5
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Antimony	10 N	(75 - 115)			SW846 6010B	07/31/01	EG6WT1A6
	10 N	(75 - 115)	0.52	(0-25)	SW846 6010B	07/31/01	EG6WT1A7
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Barium	90	(80 - 120)			SW846 6010B	07/31/01	EG6WT1A8
	93	(80 - 120)	2.6	(0-25)	SW846 6010B	07/31/01	EG6WT1A9
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Cadmium	92	(80 - 120)			SW846 6010B	07/31/01	EG6WT1CA
	95	(80 - 120)	2.8	(0-25)	SW846 6010B	07/31/01	EG6WT1CC
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Chromium	97	(85 - 120)			SW846 6010B	07/31/01	EG6WT1CD
	97	(85 - 120)	0.28	(0-25)	SW846 6010B	07/31/01	EG6WT1CE
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Beryllium	98	(80 - 120)			SW846 6010B	07/31/01	EG6WT1CF
	101	(80 - 120)	2.4	(0-25)	SW846 6010B	07/31/01	EG6WT1CG
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID
Date Sampled...: 07/30/01 10:30 **Date Received..:** 07/30/01 17:45

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	87	(80 - 120)			SW846 6010B	07/31/01	EG6WT1CH
	90	(80 - 120)	2.9	(0-25)	SW846 6010B	07/31/01	EG6WT1CJ
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Selenium	84	(70 - 115)			SW846 6010B	07/31/01	EG6WT1CK
	86	(70 - 115)	2.2	(0-25)	SW846 6010B	07/31/01	EG6WT1CL
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Silver	81	(80 - 120)			SW846 6010B	07/31/01	EG6WT1CM
	83	(80 - 120)	1.8	(0-25)	SW846 6010B	07/31/01	EG6WT1CN
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Cobalt	95	(80 - 120)			SW846 6010B	07/31/01	EG6WT1CP
	99	(80 - 120)	3.2	(0-25)	SW846 6010B	07/31/01	EG6WT1CQ
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Copper	92	(80 - 120)			SW846 6010B	07/31/01	EG6WT1CR
	95	(80 - 120)	2.2	(0-25)	SW846 6010B	07/31/01	EG6WT1CT
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Molybdenum	82	(80 - 120)			SW846 6010B	07/31/01	EG6WT1CU
	84	(80 - 120)	2.2	(0-25)	SW846 6010B	07/31/01	EG6WT1CV
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					
Nickel	94	(80 - 120)			SW846 6010B	07/31/01	EG6WT1CW
	96	(80 - 120)	1.8	(0-25)	SW846 6010B	07/31/01	EG6WT1CX
		Dilution Factor: 1					
		Analysis Time..: 17:46			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1212192					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1G300190 **Matrix.....:** SOLID
Date Sampled...: 07/30/01 10:30 **Date Received..:** 07/30/01 17:45

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	90	(75 - 120)			SW846 6010B	07/31/01	EG6WT1C0
	92	(75 - 120)	2.4	(0-25)	SW846 6010B	07/31/01	EG6WT1C1

Dilution Factor: 1
Analysis Time..: 17:46 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 1212192

Vanadium	89	(80 - 120)			SW846 6010B	07/31/01	EG6WT1C2
	95	(80 - 120)	3.7	(0-25)	SW846 6010B	07/31/01	EG6WT1C3

Dilution Factor: 1
Analysis Time..: 17:46 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 1212192

Zinc	90	(80 - 120)			SW846 6010B	07/31/01	EG6WT1C4
	94	(80 - 120)	2.4	(0-25)	SW846 6010B	07/31/01	EG6WT1C5

Dilution Factor: 1
Analysis Time..: 17:46 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 1212192

MS Lot-Sample #: E1G300190-001 **Prep Batch #...:** 1212361

Mercury	109	(80 - 120)			SW846 7471A	07/31/01	EG6WT1C6
	98	(80 - 120)	9.2	(0-20)	SW846 7471A	07/31/01	EG6WT1C7

Dilution Factor: 1
Analysis Time..: 18:00 Instrument ID..: M04 Analyst ID.....: 021088
MS Run #.....: 1212195

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	E1G300190	**Work Order #...:**	EG6WT1C8-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1G300190-001		EG6WT1C9-MSD		
Date Sampled...:	07/30/01 10:30	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1212314
Prep Date.....:	07/31/01	**Analysis Date..:**	07/31/01		
Prep Batch #...:	1212600	**Analysis Time..:**	14:02		
Dilution Factor:	1	**Analyst ID.....:**	015590	**Instrument ID..:**	MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**124**	**(60 - 150)**			**SW846 8260B**
	123	**(60 - 150)**	**0.22**	**(0-30)**	**SW846 8260B**
Benzene	**115**	**(70 - 140)**			**SW846 8260B**
	113	**(70 - 140)**	**2.2**	**(0-30)**	**SW846 8260B**
Trichloroethene	**101**	**(70 - 130)**			**SW846 8260B**
	99	**(70 - 130)**	**2.5**	**(0-30)**	**SW846 8260B**
Toluene	**105**	**(70 - 130)**			**SW846 8260B**
	100	**(70 - 130)**	**4.8**	**(0-30)**	**SW846 8260B**
Chlorobenzene	**92**	**(70 - 130)**			**SW846 8260B**
	90	**(70 - 130)**	**1.7**	**(0-30)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	116	(70 - 130)
	116	(70 - 130)
1,2-Dichloroethane-d4	106	(60 - 140)
	106	(60 - 140)
Toluene-d8	114	(70 - 130)
	113	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...:	E1G300190	**Work Order #...:**	EG6W31AE-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1G300190-007		EG6W31AF-MSD		
Date Sampled...:	07/30/01 15:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1212193
Prep Date.....:	07/30/01	**Analysis Date..:**	07/30/01		
Prep Batch #...:	1212357	**Analysis Time..:**	23:58		
Dilution Factor:	1	**Analyst ID.....:**	001464	**Instrument ID..:**	G15

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	**116**	**(80 - 140)**			**SW846 8015B**
	127	**(80 - 140)**	**9.1**	**(0-40)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	119	(60 - 130)
	126	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...:	E1G300190	**Work Order #...:**	EG6W81A2-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1G300190-012		EG6W81A3-MSD		
Date Sampled...:	07/30/01 16:00	**Date Received..:**	07/30/01 17:45	**MS Run #.....:**	1211297
Prep Date.....:	07/30/01	**Analysis Date..:**	08/01/01		
Prep Batch #...:	1211559	**Analysis Time..:**	02:31		
Dilution Factor:	5	**Analyst ID.....:**	356074	**Instrument ID..:**	G02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**0.0 NC,MS**	**(60 - 130)**			**SW846 8015B**
	0.0 NC,MS	**(60 - 130)**	**0.0**	**(0-35)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	91	(60 - 130)
	91	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

SEVERN
TRENT
SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
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www.stl-inc.com

August 24, 2001

STL LOT NUMBER: E1H010342
NELAC Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the 12 samples received under chain of custody by STL Los Angeles on August 1, 2001. These samples are associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report. The PAHs by 8310 analysis was performed by Del Mar Analytical. See attached report for any related anomaly.

STL Los Angeles certifies that the tests performed at our facility meet all the requirements of NELAC. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,

Diane Suzuki
Project Manager
CC: Project File

This report contains 000064 pages.

ACCREDITED IN ACCORDANCE WITH nelac

STL Los Angeles is a part of Severn Trent Laboratories, Inc.

BOE-C6-0233202

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: Haley & Aldrich	Project Manager: Scott Zachary	Date: 8-1-01	Chain of Custody Number: 054016
Address: 9040	Telephone Number (Area Code)/Fax Number	Lab Number: E1H010342	Page 1 of 2
City: SAN Diego; State: CA; Zip Code:	Site Contact: Rich Farson	Lab Contact: Diane Suzuki	
Project Name and Location (State): Boeing Former C6	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): As	PAHs	TPH	VOCs	Metal	PAHs							Special Instructions/ Conditions of Receipt
Bldg-66-66-9-4	8-1-01	900				X		1							X												24 hr
Bldg-66-66-9-5	8-1-01	903				X		1							X												TAT
Bldg-32-2-2-BB-5-20-11	8-1-01	927				X		1							X												
Bldg-32-2-2-BB-5-20-12	8-1-01	930				X		1							X												
SP#13 (Southwest)	8-1-01	937				X		1							~~X~~		X	X	X	X							
SP#13 (North)	8-1-01	945				X		1							~~X~~		X	X	X	X							
Bldg-1-C-13-080101-4	8-1-01	1003				X		1								X											
Bldg-1-C-13-080101-5	8-1-01	1005				X		1								X											
Bldg-1-C-13-080101-6	8-1-01	1008				X		1								X											
Bldg-1-C-13-080101-7	8-1-01	1011				X		1								X											
Bldg-1-C-13-080101-8	8-1-01	1014				X		1								X											
Bldg-1-C-13-080101-9	8-1-01	1016				X		1								X											

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required

☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	8-1-01	16:20	1. Received By: [signature]	8/01/01	16:20
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

BOE-C6-0233203

STL LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 8/01/01

Quantims Lot #: E1H010342
Quote #: 4229T
Client Name: Haley & Aldrich
Project: Boeing C-6
Received by: Pucolk
Date/Time Received: 8/01/01 16:20
Delivered by: [X] Client [ ] Airborne [ ] Fed Ex [ ] DHL [ ] Ultra-Ex [ ] Rey B. [ ] UPS [ ] DES [ ] Other

Initial / Date

Custody Seal Status: [ ] Intact [ ] Broken [X] None ..... AR 8/01/01
Custody Seal #(s): [X] No Seal # .....
Sample Container(s): [ ] STL-LA [X] Client [ ] N/A .....
Temperature(s) (COOLER/BLANK) in °C: 5°C (CORRECTED TEMP) 5.2°C
Thermometer Used: [X] IR (Infra-red) [ ] Digital (Probe) .....
Samples: [X] Intact [ ] Broken [ ] Other .....
Anomalies: [X] No [ ] Yes (See Clouseau) .....
Labeled by AR .....
Labeling checked by TLS .....

Turn Around Time: [X] RUSH-24HR [ ] RUSH-48HR [ ] RUSH-72HR [ ] NORMAL .....
Short-Hold Notification: [ ] Ph [ ] Wet Chem [ ] Metals (Filter/Pres) [ ] Encore [X] N/A ...
Outside Analysis(es) (Test/Lab/Date Sent Out):
PAH's to Del Mar

NOTE: PAGE 2 of 2 COC is logged under lot ID# E1H010343

********** LEAVE NO BLANK SPACES ; USE N/A **********

Fraction	1→12										PH
VOAh /*											N/A
B sleeve	1										—
											—

x:HCl xx:Sodium Hydroxide xxx:Zinc Acetate/Sodium Hydroxide x: H2SO4 x:HNO3 x/f:HNO3-Field filtered x/f:HNO3-Lab filtered
CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA

* Number of VOA's w/ Headspace present

LOGGED BY/DATE: Pucolk 8/01/01 REVIEWED BY/DATE: [signature] 8/2/01

000003

BOE-C6-0233204

HALEY & ALDRICH INC

Client Sample ID: SP#13(Southwest)

GC Semivolatiles

Lot-Sample #...:	E1H010342-005	**Work Order #...:**	EHA371AA	**Matrix.....:**	SOLID
Date Sampled...:	08/01/01 09:37	**Date Received..:**	08/01/01 16:20	**MS Run #.....:**	1213277
Prep Date.....:	08/01/01	**Analysis Date..:**	08/02/01		
Prep Batch #...:	1213545	**Analysis Time..:**	12:37		
Dilution Factor:	1				
Analyst ID.....:	356074	**Instrument ID..:**	G02		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C8-C9	ND	10	mg/kg	5.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	ND	10	mg/kg	5.0
C24-C27	**6.1 J**	**10**	**mg/kg**	**5.0**
C28-C31	**7.0 J**	**10**	**mg/kg**	**5.0**
C32-C35	ND	10	mg/kg	5.0
C36-C39	ND	10	mg/kg	5.0
C40+	ND	10	mg/kg	5.0
Total Carbon Chain Range	**26**	**10**	**mg/kg**	**5.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	90	(60 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP#13(Southwest)

GC Volatiles

Lot-Sample #...:	E1H010342-005	**Work Order #...:**	EHA371AC	**Matrix.....:**	SOLID
Date Sampled...:	08/01/01 09:37	**Date Received..:**	08/01/01 16:20	**MS Run #.....:**	1214127
Prep Date.....:	08/02/01	**Analysis Date..:**	08/02/01		
Prep Batch #...:	1214293	**Analysis Time..:**	09:54		
Dilution Factor:	1				
Analyst ID.....:	001464	**Instrument ID..:**	G15		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	83	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP#13(Southwest)

GC/MS Volatiles

Lot-Sample #...:	E1H010342-005	**Work Order #...:**	EHA371AD	**Matrix.....:**	SOLID
Date Sampled...:	08/01/01 09:37	**Date Received..:**	08/01/01 16:20	**MS Run #.....:**	1214141
Prep Date.....:	08/01/01	**Analysis Date..:**	08/01/01		
Prep Batch #...:	1214319	**Analysis Time..:**	21:06		
Dilution Factor:	1				
Analyst ID.....:	999998	**Instrument ID..:**	MSD		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SP#13(Southwest)

GC/MS Volatiles

Lot-Sample #...: E1H010342-005 Work Order #...: EHA371AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	106	(70 - 130)
1,2-Dichloroethane-d4	107	(60 - 140)
Toluene-d8	103	(70 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP#13(North)

GC Semivolatiles

Lot-Sample #...:	E1H010342-006	**Work Order #...:**	EHA4D1AC	**Matrix.....:**	SOLID
Date Sampled...:	08/01/01 09:45	**Date Received..:**	08/01/01 16:20	**MS Run #.....:**	1213277
Prep Date.....:	08/01/01	**Analysis Date..:**	08/02/01		
Prep Batch #...:	1213545	**Analysis Time..:**	13:15		
Dilution Factor:	1				
Analyst ID.....:	356074	**Instrument ID..:**	G02		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C8-C9	ND	10	mg/kg	5.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	ND	10	mg/kg	5.0
C24-C27	ND	10	mg/kg	5.0
C28-C31	ND	10	mg/kg	5.0
C32-C35	ND	10	mg/kg	5.0
C36-C39	ND	10	mg/kg	5.0
C40+	ND	10	mg/kg	5.0
Total Carbon Chain Range	ND	10	mg/kg	5.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	86	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP#13(North)

GC Volatiles

Lot-Sample #...:	E1H010342-006	**Work Order #...:**	EHA4D1AD	**Matrix.....:**	SOLID
Date Sampled...:	08/01/01 09:45	**Date Received..:**	08/01/01 16:20	**MS Run #.....:**	1214127
Prep Date.....:	08/02/01	**Analysis Date..:**	08/02/01		
Prep Batch #...:	1214293	**Analysis Time..:**	10:21		
Dilution Factor:	1				
Analyst ID.....:	001464	**Instrument ID..:**	G15		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	85	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP#13(North)

GC/MS Volatiles

Lot-Sample #...:	E1H010342-006	**Work Order #...:**	EHA4D1AE	**Matrix.....:**	SOLID
Date Sampled...:	08/01/01 09:45	**Date Received..:**	08/01/01 16:20	**MS Run #.....:**	1214141
Prep Date.....:	08/01/01	**Analysis Date..:**	08/01/01		
Prep Batch #...:	1214319	**Analysis Time..:**	21:37		
Dilution Factor:	1				
Analyst ID.....:	999998	**Instrument ID..:**	MSD		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

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HALEY & ALDRICH INC

Client Sample ID: SP#13(North)

GC/MS Volatiles

Lot-Sample #...: E1H010342-006 Work Order #...: EHA4D1AE Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	105	(70 - 130)
1,2-Dichloroethane-d4	108	(60 - 140)
Toluene-d8	103	(70 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP#13(Southwest)

TOTAL Metals

Lot-Sample #...: E1H010342-005 Matrix.....: SOLID
Date Sampled...: 08/01/01 09:37 Date Received..: 08/01/01 16:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1213513						
Aluminum	15900	20.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AE
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 8.0	
Antimony	ND	6.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AG
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.60	
Barium	96.6	2.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AH
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.10	
Cadmium	0.44 B	0.50	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AJ
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.060	
Chromium	27.2	1.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AK
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.10	
Beryllium	0.49 B	0.50	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AL
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.050	
Lead	5.7	0.50	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AM
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.30	
Selenium	1.1	0.50	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AN
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AP
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.10	
Cobalt	9.0	5.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AQ
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.10	

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HALEY & ALDRICH INC

Client Sample ID: SP#13(Southwest)

TOTAL Metals

Lot-Sample #...: E1H010342-005 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	18.8	2.5	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AR
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.40	
Molybdenum	0.39 B	4.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AT
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.30	
Nickel	17.3	4.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AU
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AV
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.80	
Vanadium	44.4	5.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AW
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.10	
Zinc	52.9	2.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AX
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 1.0	
Arsenic	5.2	1.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA371AF
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.40	

Prep Batch #...: 1213514

Mercury	0.041 B	0.10	mg/kg	SW846 7471A	08/01/01	EHA371A0
		Dilution Factor: 1		Analysis Time..: 18:43	Analyst ID.....: 0210887	
		Instrument ID..: M04		MS Run #.....: 1213248	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP#13(North)

TOTAL Metals

Lot-Sample #...: E1H010342-006 Matrix.....: SOLID
Date Sampled...: 08/01/01 09:45 Date Received..: 08/01/01 16:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1213513						
Aluminum	**16500**	**20.0**	**mg/kg**	**SW846 6010B**	**08/01-08/02/01**	**EHA4D1AF**
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 8.0	
Antimony	ND	6.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA4D1AH
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.60	
Barium	**100**	**2.0**	**mg/kg**	**SW846 6010B**	**08/01-08/02/01**	**EHA4D1AJ**
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.10	
Cadmium	**0.53**	**0.50**	**mg/kg**	**SW846 6010B**	**08/01-08/02/01**	**EHA4D1AK**
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.060	
Chromium	**30.3**	**1.0**	**mg/kg**	**SW846 6010B**	**08/01-08/02/01**	**EHA4D1AL**
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.10	
Beryllium	**0.51**	**0.50**	**mg/kg**	**SW846 6010B**	**08/01-08/02/01**	**EHA4D1AM**
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.050	
Lead	**5.1**	**0.50**	**mg/kg**	**SW846 6010B**	**08/01-08/02/01**	**EHA4D1AN**
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.30	
Selenium	**1.2**	**0.50**	**mg/kg**	**SW846 6010B**	**08/01-08/02/01**	**EHA4D1AP**
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA4D1AQ
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.10	
Cobalt	**10.3**	**5.0**	**mg/kg**	**SW846 6010B**	**08/01-08/02/01**	**EHA4D1AR**
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.10	

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HALEY & ALDRICH INC

Client Sample ID: SP#13(North)

TOTAL Metals

Lot-Sample #...: E1H010342-006 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	24.0	2.5	mg/kg	SW846 6010B	08/01-08/02/01	EHA4D1AT
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.40	
Molybdenum	0.32 B	4.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA4D1AU
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.30	
Nickel	21.2	4.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA4D1AV
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA4D1AW
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.80	
Vanadium	48.8	5.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA4D1AX
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.10	
Zinc	58.7	2.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA4D1A0
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 1.0	
Arsenic	7.6	1.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA4D1AG
		Dilution Factor: 1		Analysis Time..: 14:04	Analyst ID.....: 0210887	
		Instrument ID..: M01		MS Run #.....: 1213247	MDL.....: 0.40	
Prep Batch #...: 1213514						
Mercury	0.046 B	0.10	mg/kg	SW846 7471A	08/01/01	EHA4D1AA
		Dilution Factor: 1		Analysis Time..: 18:45	Analyst ID.....: 0210887	
		Instrument ID..: M04		MS Run #.....: 1213248	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

QC DATA ASSOCIATION SUMMARY

E1H010342

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 6010B		1213513	1213247
002	SOLID	SW846 6010B		1213513	1213247
003	SOLID	SW846 6010B		1213513	1213247
004	SOLID	SW846 6010B		1213513	1213247
005	SOLID	SW846 8015B		1213545	1213277
	SOLID	SW846 8015B		1214293	1214127
	SOLID	SW846 7471A		1213514	1213248
	SOLID	SW846 8260B		1214319	1214141
	SOLID	SW846 6010B		1213513	1213247
006	SOLID	SW846 8015B		1213545	1213277
	SOLID	SW846 8015B		1214293	1214127
	SOLID	SW846 7471A		1213514	1213248
	SOLID	SW846 8260B		1214319	1214141
	SOLID	SW846 6010B		1213513	1213247

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E1H010342 **Work Order #...:** EHCDM1AA **Matrix.....:** SOLID
MB Lot-Sample #: E1H010000-545

Prep Date.....: 08/01/01 **Analysis Time..:** 11:19
Analysis Date..: 08/02/01 **Prep Batch #...:** 1213545 **Instrument ID..:** G02
Dilution Factor: 1

Analyst ID.....: 356074

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
C8-C9	ND	10	mg/kg	SW846 8015B
C10-C11	ND	10	mg/kg	SW846 8015B
C12-C13	ND	10	mg/kg	SW846 8015B
C14-C15	ND	10	mg/kg	SW846 8015B
C16-C17	ND	10	mg/kg	SW846 8015B
C18-C19	ND	10	mg/kg	SW846 8015B
C20-C23	ND	10	mg/kg	SW846 8015B
C24-C27	ND	10	mg/kg	SW846 8015B
C28-C31	ND	10	mg/kg	SW846 8015B
C32-C35	ND	10	mg/kg	SW846 8015B
C36-C39	ND	10	mg/kg	SW846 8015B
C40+	ND	10	mg/kg	SW846 8015B
Total Carbon Chain Range	ND	10	mg/kg	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	102	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E1H010342
MB Lot-Sample #: E1H020000-293

Work Order #...: EHDCV1AA

Matrix.....: SOLID

Prep Date.....: 08/02/01

Analysis Date..: 08/02/01
Dilution Factor: 1

Prep Batch #...: 1214293

Analysis Time..: 09:16
Instrument ID..: G15

Analyst ID.....: 001464

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
C6-C8	ND	1.0	mg/kg	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	86	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1H010342 **Work Order #...:** EHDF11AA **Matrix.....:** SOLID
MB Lot-Sample #: E1H020000-319

Prep Date.....: 08/01/01 **Analysis Time..:** 20:32
Analysis Date..: 08/01/01 **Prep Batch #...:** 1214319 **Instrument ID..:** MSD
Dilution Factor: 1

Analyst ID.....: 999998

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1H010342 **Work Order #...:** EHDF11AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	107	(70 - 130)
1,2-Dichloroethane-d4	102	(60 - 140)
Toluene-d8	105	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E1H010000-513 **Prep Batch #...:** 1213513						
Aluminum	ND	20.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AA
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AD
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	ND	2.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AE
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	ND	0.50	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AF
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	**0.20 B**	**1.0**	**mg/kg**	**SW846 6010B**	**08/01-08/02/01**	**EHA561AG**
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	ND	0.50	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AH
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	ND	0.50	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AJ
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AK
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AL
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AM
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Copper	ND	2.5	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AN
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Molybdenum	ND	4.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AP
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AQ
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AR
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AT
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AU
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	08/01-08/02/01	EHA561AC
		Dilution Factor: 1				
		Analysis Time..: 12:53		Analyst ID.....: 021088	Instrument ID..: M01	

MB Lot-Sample #: E1H010000-514 **Prep Batch #...:** 1213514

Mercury	ND	0.10	mg/kg	SW846 7471A	08/01/01	EHA6C1AA
		Dilution Factor: 1				
		Analysis Time..: 18:40		Analyst ID.....: 021088	Instrument ID..: M04	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E1H010342 **Work Order #...:** EHCDM1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H010000-545
Prep Date.....: 08/01/01 **Analysis Date..:** 08/02/01
Prep Batch #...: 1213545 **Analysis Time..:** 11:58
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Diesel)	**250**	**242**	**mg/kg**	**97**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	105	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E1H010342 **Work Order #...:** EHDCV1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H020000-293
Prep Date.....: 08/02/01 **Analysis Date..:** 08/02/01
Prep Batch #...: 1214293 **Analysis Time..:** 08:49
Dilution Factor: 1 **Instrument ID..:** G15
Analyst ID.....: 001464

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Gasoline)	**5.00**	**6.37**	**mg/kg**	**127**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	114	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E1H010342 **Work Order #...:** EHDF11AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H020000-319
Prep Date.....: 08/01/01 **Analysis Date..:** 08/01/01
Prep Batch #...: 1214319 **Analysis Time..:** 20:00
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 999998

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	**50.0**	**61.0**	**ug/kg**	**122**	**SW846 8260B**
Benzene	**50.0**	**61.0**	**ug/kg**	**122**	**SW846 8260B**
Trichloroethene	**50.0**	**53.2**	**ug/kg**	**106**	**SW846 8260B**
Toluene	**50.0**	**53.0**	**ug/kg**	**106**	**SW846 8260B**
Chlorobenzene	**50.0**	**50.4**	**ug/kg**	**101**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	107	(70 - 130)
1,2-Dichloroethane-d4	110	(60 - 140)
Toluene-d8	105	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E1H010000-513 **Prep Batch #...:** 1213513							
Aluminum	200	177	mg/kg	88	SW846 6010B	08/01-08/02/01	EHA561AV
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	50.0	46.3	mg/kg	93	SW846 6010B	08/01-08/02/01	EHA561AX
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	200	199	mg/kg	99	SW846 6010B	08/01-08/02/01	EHA561A0
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	5.00	5.25	mg/kg	105	SW846 6010B	08/01-08/02/01	EHA561A1
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	20.0	21.8	mg/kg	109	SW846 6010B	08/01-08/02/01	EHA561A2
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	5.00	5.21	mg/kg	104	SW846 6010B	08/01-08/02/01	EHA561A3
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	50.0	46.3	mg/kg	93	SW846 6010B	08/01-08/02/01	EHA561A4
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	200	177	mg/kg	88	SW846 6010B	08/01-08/02/01	EHA561A5
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Silver	5.00	4.87	mg/kg	97	SW846 6010B	08/01-08/02/01	EHA561A6
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	50.0	52.1	mg/kg	104	SW846 6010B	08/01-08/02/01	EHA561A7
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	25.0	24.4	mg/kg	98	SW846 6010B	08/01-08/02/01	EHA561A8
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	100	99.2	mg/kg	99	SW846 6010B	08/01-08/02/01	EHA561A9
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	50.0	52.1	mg/kg	104	SW846 6010B	08/01-08/02/01	EHA561CA
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	200	179	mg/kg	89	SW846 6010B	08/01-08/02/01	EHA561CC
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	50.0	51.7	mg/kg	103	SW846 6010B	08/01-08/02/01	EHA561CD
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	50.0	51.6	mg/kg	103	SW846 6010B	08/01-08/02/01	EHA561CE
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	200	186	mg/kg	93	SW846 6010B	08/01-08/02/01	EHA561AW
			Dilution Factor: 1				
			Analysis Time..: 13:00		Analyst ID.....: 021088	Instrument ID..: M01	

LCS Lot-Sample#: E1H010000-514 **Prep Batch #...:** 1213514

Mercury	0.833	0.828	mg/kg	99	SW846 7471A	08/01/01	EHA6C1AC
			Dilution Factor: 1				
			Analysis Time..: 18:42		Analyst ID.....: 021088	Instrument ID..: M04	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E1H010342 **Work Order #...:** EHCDM1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H010000-545
Prep Date.....: 08/01/01 **Analysis Date..:** 08/02/01
Prep Batch #...: 1213545 **Analysis Time..:** 11:58
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**97**	**(60 - 130)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	105	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E1H010342 **Work Order #...:** EHDCV1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H020000-293
Prep Date.....: 08/02/01 **Analysis Date..:** 08/02/01
Prep Batch #...: 1214293 **Analysis Time..:** 08:49
Dilution Factor: 1 **Instrument ID..:** G15
Analyst ID.....: 001464

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Gasoline)	**127**	**(80 - 140)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	114	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E1H010342 **Work Order #...:** EHDF11AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1H020000-319
Prep Date.....: 08/01/01 **Analysis Date..:** 08/01/01
Prep Batch #...: 1214319 **Analysis Time..:** 20:00
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 999998

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	**122**	**(60 - 150)**	**SW846 8260B**
Benzene	**122**	**(70 - 140)**	**SW846 8260B**
Trichloroethene	**106**	**(70 - 130)**	**SW846 8260B**
Toluene	**106**	**(70 - 130)**	**SW846 8260B**
Chlorobenzene	**101**	**(70 - 130)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	107	(70 - 130)
1,2-Dichloroethane-d4	110	(60 - 140)
Toluene-d8	105	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E1H010000-513 **Prep Batch #...:** 1213513					
Aluminum	88	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561AV
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	93	(75 - 115)	SW846 6010B	08/01-08/02/01	EHA561AX
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Barium	99	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561A0
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	105	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561A1
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	109	(85 - 120)	SW846 6010B	08/01-08/02/01	EHA561A2
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	104	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561A3
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Lead	93	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561A4
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	88	(70 - 115)	SW846 6010B	08/01-08/02/01	EHA561A5
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Silver	97	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561A6
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	104	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561A7
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	98	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561A8
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	99	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561A9
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	104	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561CA
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	89	(75 - 120)	SW846 6010B	08/01-08/02/01	EHA561CC
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	103	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561CD
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	103	(80 - 120)	SW846 6010B	08/01-08/02/01	EHA561CE
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	93	(75 - 115)	SW846 6010B	08/01-08/02/01	EHA561AW
		Dilution Factor: 1			
		Analysis Time..: 13:00	Analyst ID.....: 021088	Instrument ID..: M01	

LCS Lot-Sample#: E1H010000-514 **Prep Batch #...:** 1213514

Mercury	99	(85 - 115)	SW846 7471A	08/01/01	EHA6C1AC
		Dilution Factor: 1			
		Analysis Time..: 18:42	Analyst ID.....: 021088	Instrument ID..: M04	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID
Date Sampled...: 08/01/01 12:45 **Date Received..:** 08/01/01 16:20

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT		UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E1H010343-001 **Prep Batch #...:** 1213513										
Aluminum										
	10500	200	11300	NC	mg/kg			SW846 6010B	08/01-08/02/01	EHA301A2
	10500	200	11200	NC	mg/kg			SW846 6010B	08/01-08/02/01	EHA301A3
			Dilution Factor: 1							
			Analysis Time..: 14:29			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1213247							
Antimony										
	ND	50.0	17.0	N	mg/kg	34		SW846 6010B	08/01-08/02/01	EHA301A6
	ND	50.0	17.1	N	mg/kg	34	0.12	SW846 6010B	08/01-08/02/01	EHA301A7
			Dilution Factor: 1							
			Analysis Time..: 14:29			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1213247							
Barium										
	206	200	391		mg/kg	93		SW846 6010B	08/01-08/02/01	EHA301A8
	206	200	397		mg/kg	95	1.4	SW846 6010B	08/01-08/02/01	EHA301A9
			Dilution Factor: 1							
			Analysis Time..: 14:29			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1213247							
Cadmium										
	0.77	5.00	5.85		mg/kg	102		SW846 6010B	08/01-08/02/01	EHA301CA
	0.77	5.00	5.34		mg/kg	91	9.1	SW846 6010B	08/01-08/02/01	EHA301CC
			Dilution Factor: 1							
			Analysis Time..: 14:29			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1213247							
Chromium										
	26.7	20.0	49.0		mg/kg	112		SW846 6010B	08/01-08/02/01	EHA301CD
	26.7	20.0	49.2		mg/kg	113	0.34	SW846 6010B	08/01-08/02/01	EHA301CE
			Dilution Factor: 1							
			Analysis Time..: 14:29			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1213247							
Beryllium										
	0.36	5.00	5.44		mg/kg	102		SW846 6010B	08/01-08/02/01	EHA301CF
	0.36	5.00	5.31		mg/kg	99	2.3	SW846 6010B	08/01-08/02/01	EHA301CG
			Dilution Factor: 1							
			Analysis Time..: 14:29			Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 1213247							

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID
Date Sampled...: 08/01/01 12:45 **Date Received..:** 08/01/01 16:20

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead									
	3.0	50.0	49.0	mg/kg	92		SW846 6010B	08/01-08/02/01	EHA301CH
	3.0	50.0	48.1	mg/kg	90	1.7	SW846 6010B	08/01-08/02/01	EHA301CJ
				Dilution Factor: 1					
				Analysis Time..: 14:29		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1213247					
Selenium									
	0.52	200	174	mg/kg	87		SW846 6010B	08/01-08/02/01	EHA301CK
	0.52	200	171	mg/kg	85	1.7	SW846 6010B	08/01-08/02/01	EHA301CL
				Dilution Factor: 1					
				Analysis Time..: 14:29		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1213247					
Silver									
	ND	5.00	4.66	mg/kg	93		SW846 6010B	08/01-08/02/01	EHA301CM
	ND	5.00	4.53	mg/kg	91	2.8	SW846 6010B	08/01-08/02/01	EHA301CN
				Dilution Factor: 1					
				Analysis Time..: 14:29		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1213247					
Cobalt									
	8.0	50.0	55.9	mg/kg	96		SW846 6010B	08/01-08/02/01	EHA301CP
	8.0	50.0	56.9	mg/kg	98	1.7	SW846 6010B	08/01-08/02/01	EHA301CQ
				Dilution Factor: 1					
				Analysis Time..: 14:29		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1213247					
Copper									
	10.4	25.0	35.2	mg/kg	99		SW846 6010B	08/01-08/02/01	EHA301CR
	10.4	25.0	33.8	mg/kg	94	4.0	SW846 6010B	08/01-08/02/01	EHA301CT
				Dilution Factor: 1					
				Analysis Time..: 14:29		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1213247					
Molybdenum									
	1.2	100	94.8	mg/kg	94		SW846 6010B	08/01-08/02/01	EHA301CU
	1.2	100	92.0	mg/kg	91	2.9	SW846 6010B	08/01-08/02/01	EHA301CV
				Dilution Factor: 1					
				Analysis Time..: 14:29		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1213247					
Nickel									
	20.6	50.0	69.0	mg/kg	97		SW846 6010B	08/01-08/02/01	EHA301CW
	20.6	50.0	68.9	mg/kg	97	0.15	SW846 6010B	08/01-08/02/01	EHA301CX
				Dilution Factor: 1					
				Analysis Time..: 14:29		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1213247					

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID
Date Sampled...: 08/01/01 12:45 **Date Received..:** 08/01/01 16:20

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium									
	ND	200	184	mg/kg	92		SW846 6010B	08/01-08/02/01	EHA301C0
	ND	200	179	mg/kg	89	3.2	SW846 6010B	08/01-08/02/01	EHA301C1
				Dilution Factor: 1					
				Analysis Time..: 14:29		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1213247					
Vanadium									
	49.6	50.0	99.5	mg/kg	100		SW846 6010B	08/01-08/02/01	EHA301C2
	49.6	50.0	98.1	mg/kg	97	1.4	SW846 6010B	08/01-08/02/01	EHA301C3
				Dilution Factor: 1					
				Analysis Time..: 14:29		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1213247					
Zinc									
	36.3	50.0	85.9	mg/kg	99		SW846 6010B	08/01-08/02/01	EHA301C4
	36.3	50.0	84.2	mg/kg	96	2.0	SW846 6010B	08/01-08/02/01	EHA301C5
				Dilution Factor: 1					
				Analysis Time..: 14:29		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1213247					
Arsenic									
	2.8	200	185	mg/kg	91		SW846 6010B	08/01-08/02/01	EHA301A4
	2.8	200	180	mg/kg	89	2.8	SW846 6010B	08/01-08/02/01	EHA301A5
				Dilution Factor: 1					
				Analysis Time..: 14:29		Instrument ID..: M01		Analyst ID.....: 021088	
				MS Run #.....: 1213247					

MS Lot-Sample #: E1H010343-001 **Prep Batch #...:** 1213514

Mercury									
	ND	0.167	0.177	mg/kg	106		SW846 7471A	08/01/01	EHA301C6
	ND	0.167	0.180	mg/kg	108	1.9	SW846 7471A	08/01/01	EHA301C7
				Dilution Factor: 1					
				Analysis Time..: 18:48		Instrument ID..: M04		Analyst ID.....: 021088	
				MS Run #.....: 1213248					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E1H010342 **Work Order #...:** EHA371A2-MS **Matrix.....:** SOLID
MS Lot-Sample #: E1H010342-005 EHA371A3-MSD
Date Sampled...: 08/01/01 09:37 **Date Received..:** 08/01/01 16:20 **MS Run #.....:** 1213277
Prep Date.....: 08/01/01 **Analysis Date..:** 08/02/01
Prep Batch #...: 1213545 **Analysis Time..:** 13:54
Dilution Factor: 1 **Analyst ID.....:** 356074 **Instrument ID..:** G02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Diesel)	**ND**	**250**	**256**	**mg/kg**	**103**		**SW846 8015B**
	ND	**250**	**248**	**mg/kg**	**99**	**3.1**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	102	(60 - 130)
	108	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...:	E1H010342	**Work Order #...:**	EHA371A4-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1H010342-005		EHA371A5-MSD		
Date Sampled...:	08/01/01 09:37	**Date Received..:**	08/01/01 16:20	**MS Run #.....:**	1214141
Prep Date.....:	08/01/01	**Analysis Date..:**	08/01/01		
Prep Batch #...:	1214319	**Analysis Time..:**	22:08		
Dilution Factor:	1	**Analyst ID.....:**	999998	**Instrument ID..:**	MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	**ND**	**50.0**	**57.0**	**ug/kg**	**114**		**SW846 8260B**
	ND	**50.0**	**57.5**	**ug/kg**	**115**	**0.85**	**SW846 8260B**
Benzene	**ND**	**50.0**	**55.8**	**ug/kg**	**112**		**SW846 8260B**
	ND	**50.0**	**56.3**	**ug/kg**	**113**	**0.83**	**SW846 8260B**
Trichloroethene	**ND**	**50.0**	**51.2**	**ug/kg**	**102**		**SW846 8260B**
	ND	**50.0**	**50.1**	**ug/kg**	**100**	**2.2**	**SW846 8260B**
Toluene	**ND**	**50.0**	**49.3**	**ug/kg**	**99**		**SW846 8260B**
	ND	**50.0**	**48.9**	**ug/kg**	**98**	**0.93**	**SW846 8260B**
Chlorobenzene	**ND**	**50.0**	**47.8**	**ug/kg**	**96**		**SW846 8260B**
	ND	**50.0**	**46.9**	**ug/kg**	**94**	**2.0**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(70 - 130)
	105	(70 - 130)
1,2-Dichloroethane-d4	109	(60 - 140)
	110	(60 - 140)
Toluene-d8	106	(70 - 130)
	106	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...:	E1H010342	**Work Order #...:**	EHA4D1A2-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1H010342-006		EHA4D1A3-MSD		
Date Sampled...:	08/01/01 09:45	**Date Received..:**	08/01/01 16:20	**MS Run #.....:**	1214127
Prep Date.....:	08/02/01	**Analysis Date..:**	08/02/01		
Prep Batch #...:	1214293	**Analysis Time..:**	10:47		
Dilution Factor:	1	**Analyst ID.....:**	001464	**Instrument ID..:**	G15

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Gasoline)	**ND**	**5.00**	**5.58**	**mg/kg**	**112**		**SW846 8015B**
	ND	**5.00**	**5.37**	**mg/kg**	**107**	**4.0**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	119	(60 - 130)
	116	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID
Date Sampled...: 08/01/01 12:45 **Date Received..:** 08/01/01 16:20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E1H010343-001 **Prep Batch #...:** 1213513							
Aluminum	NC	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301A2
	NC	(80 - 120)		(0-25)	SW846 6010B	08/01-08/02/01	EHA301A3
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Antimony	34 N	(75 - 115)			SW846 6010B	08/01-08/02/01	EHA301A6
	34 N	(75 - 115)	0.12	(0-25)	SW846 6010B	08/01-08/02/01	EHA301A7
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Barium	93	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301A8
	95	(80 - 120)	1.4	(0-25)	SW846 6010B	08/01-08/02/01	EHA301A9
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Cadmium	102	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301CA
	91	(80 - 120)	9.1	(0-25)	SW846 6010B	08/01-08/02/01	EHA301CC
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Chromium	112	(85 - 120)			SW846 6010B	08/01-08/02/01	EHA301CD
	113	(85 - 120)	0.34	(0-25)	SW846 6010B	08/01-08/02/01	EHA301CE
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Beryllium	102	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301CF
	99	(80 - 120)	2.3	(0-25)	SW846 6010B	08/01-08/02/01	EHA301CG
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Lead	92	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301CH
	90	(80 - 120)	1.7	(0-25)	SW846 6010B	08/01-08/02/01	EHA301CJ
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID
Date Sampled...: 08/01/01 12:45 **Date Received..:** 08/01/01 16:20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	87	(70 - 115)			SW846 6010B	08/01-08/02/01	EHA301CK
	85	(70 - 115)	1.7	(0-25)	SW846 6010B	08/01-08/02/01	EHA301CL
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Silver	93	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301CM
	91	(80 - 120)	2.8	(0-25)	SW846 6010B	08/01-08/02/01	EHA301CN
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Cobalt	96	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301CP
	98	(80 - 120)	1.7	(0-25)	SW846 6010B	08/01-08/02/01	EHA301CQ
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Copper	99	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301CR
	94	(80 - 120)	4.0	(0-25)	SW846 6010B	08/01-08/02/01	EHA301CT
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Molybdenum	94	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301CU
	91	(80 - 120)	2.9	(0-25)	SW846 6010B	08/01-08/02/01	EHA301CV
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Nickel	97	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301CW
	97	(80 - 120)	0.15	(0-25)	SW846 6010B	08/01-08/02/01	EHA301CX
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Thallium	92	(75 - 120)			SW846 6010B	08/01-08/02/01	EHA301C0
	89	(75 - 120)	3.2	(0-25)	SW846 6010B	08/01-08/02/01	EHA301C1
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					
Vanadium	100	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301C2
	97	(80 - 120)	1.4	(0-25)	SW846 6010B	08/01-08/02/01	EHA301C3
		Dilution Factor: 1					
		Analysis Time..: 14:29			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 1213247					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1H010342 **Matrix.....:** SOLID
Date Sampled...: 08/01/01 12:45 **Date Received..:** 08/01/01 16:20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Zinc	99	(80 - 120)			SW846 6010B	08/01-08/02/01	EHA301C4
	96	(80 - 120)	2.0	(0-25)	SW846 6010B	08/01-08/02/01	EHA301C5

Dilution Factor: 1
Analysis Time..: 14:29 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 1213247

Arsenic	91	(75 - 115)			SW846 6010B	08/01-08/02/01	EHA301A4
	89	(75 - 115)	2.8	(0-25)	SW846 6010B	08/01-08/02/01	EHA301A5

Dilution Factor: 1
Analysis Time..: 14:29 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 1213247

MS Lot-Sample #: E1H010343-001 **Prep Batch #...:** 1213514

Mercury	106	(80 - 120)			SW846 7471A	08/01/01	EHA301C6
	108	(80 - 120)	1.9	(0-20)	SW846 7471A	08/01/01	EHA301C7

Dilution Factor: 1
Analysis Time..: 18:48 Instrument ID..: M04 Analyst ID.....: 021088
MS Run #.....: 1213248

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...:	E1H010342	**Work Order #...:**	EHA371A2-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1H010342-005		EHA371A3-MSD		
Date Sampled...:	08/01/01 09:37	**Date Received..:**	08/01/01 16:20	**MS Run #.....:**	1213277
Prep Date.....:	08/01/01	**Analysis Date..:**	08/02/01		
Prep Batch #...:	1213545	**Analysis Time..:**	13:54		
Dilution Factor:	1	**Analyst ID.....:**	356074	**Instrument ID..:**	G02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**103**	**(60 - 130)**			**SW846 8015B**
	99	**(60 - 130)**	**3.1**	**(0-35)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	102	(60 - 130)
	108	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	E1H010342	**Work Order #...:**	EHA371A4-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1H010342-005		EHA371A5-MSD		
Date Sampled...:	08/01/01 09:37	**Date Received..:**	08/01/01 16:20	**MS Run #.....:**	1214141
Prep Date.....:	08/01/01	**Analysis Date..:**	08/01/01		
Prep Batch #...:	1214319	**Analysis Time..:**	22:08		
Dilution Factor:	1	**Analyst ID.....:**	999998	**Instrument ID..:**	MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**114**	**(60 - 150)**			**SW846 8260B**
	115	**(60 - 150)**	**0.85**	**(0-30)**	**SW846 8260B**
Benzene	**112**	**(70 - 140)**			**SW846 8260B**
	113	**(70 - 140)**	**0.83**	**(0-30)**	**SW846 8260B**
Trichloroethene	**102**	**(70 - 130)**			**SW846 8260B**
	100	**(70 - 130)**	**2.2**	**(0-30)**	**SW846 8260B**
Toluene	**99**	**(70 - 130)**			**SW846 8260B**
	98	**(70 - 130)**	**0.93**	**(0-30)**	**SW846 8260B**
Chlorobenzene	**96**	**(70 - 130)**			**SW846 8260B**
	94	**(70 - 130)**	**2.0**	**(0-30)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(70 - 130)
	105	(70 - 130)
1,2-Dichloroethane-d4	109	(60 - 140)
	110	(60 - 140)
Toluene-d8	106	(70 - 130)
	106	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...:	E1H010342	**Work Order #...:**	EHA4D1A2-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E1H010342-006		EHA4D1A3-MSD		
Date Sampled...:	08/01/01 09:45	**Date Received..:**	08/01/01 16:20	**MS Run #.....:**	1214127
Prep Date.....:	08/02/01	**Analysis Date..:**	08/02/01		
Prep Batch #...:	1214293	**Analysis Time..:**	10:47		
Dilution Factor:	1	**Analyst ID.....:**	001464	**Instrument ID..:**	G15

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	**112**	**(80 - 140)**			**SW846 8015B**
	107	**(80 - 140)**	**4.0**	**(0-40)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	119	(60 - 130)
	116	(60 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Subcontracted Analysis

000053

Del Mar Analytical

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LABORATORY REPORT

Prepared For: STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705

Attention: Diane Suzuki
Project: E1H010342

Sampled: 08/01/01
Received: 08/01/01
Reported: 08/03/01

This laboratory report is confidential and is intended for the sole use of Del Mar Analytical and its client. This entire report was reviewed and approved for release.

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AZ DHS License #AZ0062

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1H010342

Report Number: CKH0016

Sampled:08/01/01
Received:08/01/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg	ug/kg				
Sample ID: CKH0016-01 (SP#13 (Southwest) - Soil)								
Acenaphthene	EPA 8310	C1H0204	250	ND	5	8/2/01	8/2/01	
Acenaphthylene	EPA 8310	C1H0204	1000	ND	5	8/2/01	8/2/01	
Anthracene	EPA 8310	C1H0204	10	**18**	5	8/2/01	8/2/01	
Benzo(a)anthracene	EPA 8310	C1H0204	10	**42**	5	8/2/01	8/2/01	
Benzo(a)pyrene	EPA 8310	C1H0204	10	**51**	5	8/2/01	8/2/01	
Benzo(b)fluoranthene	EPA 8310	C1H0204	25	**62**	5	8/2/01	8/2/01	
Benzo(g,h,i)perylene	EPA 8310	C1H0204	25	ND	5	8/2/01	8/2/01	
Benzo(k)fluoranthene	EPA 8310	C1H0204	10	**32**	5	8/2/01	8/2/01	
Chrysene	EPA 8310	C1H0204	25	**63**	5	8/2/01	8/2/01	
Dibenzo(a,h)anthracene	EPA 8310	C1H0204	25	ND	5	8/2/01	8/2/01	
Fluoranthene	EPA 8310	C1H0204	25	**88**	5	8/2/01	8/2/01	
Fluorene	EPA 8310	C1H0204	25	**30**	5	8/2/01	8/2/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1H0204	25	**39**	5	8/2/01	8/2/01	
Naphthalene	EPA 8310	C1H0204	200	ND	5	8/2/01	8/2/01	
Phenanthrene	EPA 8310	C1H0204	25	**35**	5	8/2/01	8/2/01	
Pyrene	EPA 8310	C1H0204	25	**53**	5	8/2/01	8/2/01	
Surrogate: 2-Methylanthracene (35-115%)				*117 %*				*Z3*
Sample ID: CKH0016-02 (SP#13 (North) - Soil)								
Acenaphthene	EPA 8310	C1H0204	50	ND	1	8/2/01	8/2/01	
Acenaphthylene	EPA 8310	C1H0204	200	ND	1	8/2/01	8/2/01	
Anthracene	EPA 8310	C1H0204	2.0	ND	1	8/2/01	8/2/01	
Benzo(a)anthracene	EPA 8310	C1H0204	2.0	ND	1	8/2/01	8/2/01	
Benzo(a)pyrene	EPA 8310	C1H0204	2.0	ND	1	8/2/01	8/2/01	
Benzo(b)fluoranthene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Benzo(g,h,i)perylene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Benzo(k)fluoranthene	EPA 8310	C1H0204	2.0	ND	1	8/2/01	8/2/01	
Chrysene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Dibenzo(a,h)anthracene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Fluoranthene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Fluorene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Naphthalene	EPA 8310	C1H0204	40	ND	1	8/2/01	8/2/01	
Phenanthrene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Pyrene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Surrogate: 2-Methylanthracene (35-115%)				*80.4 %*				

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1H010342

Report Number: CKH0016

Sampled:08/01/01
Received:08/01/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg	ug/kg				
Sample ID: CKH0016-03 (Bldg 1-C-13-080101-4 - Soil)								
Acenaphthene	EPA 8310	C1H0204	1000	**1500**	20	8/2/01	8/2/01	
Acenaphthylene	EPA 8310	C1H0204	4000	ND	20	8/2/01	8/2/01	
Anthracene	EPA 8310	C1H0204	40	**89**	20	8/2/01	8/2/01	
Benzo(a)anthracene	EPA 8310	C1H0204	40	**260**	20	8/2/01	8/2/01	
Benzo(a)pyrene	EPA 8310	C1H0204	40	**330**	20	8/2/01	8/2/01	
Benzo(b)fluoranthene	EPA 8310	C1H0204	100	**390**	20	8/2/01	8/2/01	
Benzo(g,h,i)perylene	EPA 8310	C1H0204	100	**430**	20	8/2/01	8/2/01	
Benzo(k)fluoranthene	EPA 8310	C1H0204	40	**140**	20	8/2/01	8/2/01	
Chrysene	EPA 8310	C1H0204	100	**360**	20	8/2/01	8/2/01	
Dibenzo(a,h)anthracene	EPA 8310	C1H0204	100	ND	20	8/2/01	8/2/01	
Fluoranthene	EPA 8310	C1H0204	100	**460**	20	8/2/01	8/2/01	
Fluorene	EPA 8310	C1H0204	100	**130**	20	8/2/01	8/2/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1H0204	100	**270**	20	8/2/01	8/2/01	
Naphthalene	EPA 8310	C1H0204	800	ND	20	8/2/01	8/2/01	
Phenanthrene	EPA 8310	C1H0204	100	**490**	20	8/2/01	8/2/01	
Pyrene	EPA 8310	C1H0204	100	**250**	20	8/2/01	8/2/01	
Surrogate: 2-Methylanthracene (35-115%)				*234 %*				*Z3*
Sample ID: CKH0016-04 (Bldg 1-C-13-080101-5 - Soil)								
Acenaphthene	EPA 8310	C1H0204	250	**960**	5	8/2/01	8/2/01	
Acenaphthylene	EPA 8310	C1H0204	1000	ND	5	8/2/01	8/2/01	
Benzo(a)anthracene	EPA 8310	C1H0204	10	**210**	5	8/2/01	8/2/01	
Benzo(b)fluoranthene	EPA 8310	C1H0204	25	**180**	5	8/2/01	8/2/01	
Benzo(g,h,i)perylene	EPA 8310	C1H0204	25	**120**	5	8/2/01	8/2/01	
Chrysene	EPA 8310	C1H0204	25	**250**	5	8/2/01	8/2/01	
Dibenzo(a,h)anthracene	EPA 8310	C1H0204	25	ND	5	8/2/01	8/2/01	
Fluoranthene	EPA 8310	C1H0204	25	**560**	5	8/2/01	8/2/01	
Fluorene	EPA 8310	C1H0204	25	**100**	5	8/2/01	8/2/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1H0204	25	**130**	5	8/2/01	8/2/01	
Naphthalene	EPA 8310	C1H0204	200	ND	5	8/2/01	8/2/01	
Phenanthrene	EPA 8310	C1H0204	25	**570**	5	8/2/01	8/2/01	
Pyrene	EPA 8310	C1H0204	25	**340**	5	8/2/01	8/2/01	
Surrogate: 2-Methylanthracene (35-115%)				*504 %*				*Z3*

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STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1H010342

Report Number: CKH0016

Sampled:08/01/01
Received:08/01/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg	ug/kg				
Sample ID: CKH0016-04RE1 (Bldg 1-C-13-080101-5 - Soil)								
Anthracene	EPA 8310	C1H0204	40	**190**	20	8/2/01	8/2/01	
Benzo(a)pyrene	EPA 8310	C1H0204	40	**240**	20	8/2/01	8/2/01	
Benzo(k)fluoranthene	EPA 8310	C1H0204	40	**150**	20	8/2/01	8/2/01	
Sample ID: CKH0016-05 (Bldg 1-C-13-080101-6 - Soil)								
Acenaphthene	EPA 8310	C1H0204	50	ND	1	8/2/01	8/2/01	
Acenaphthylene	EPA 8310	C1H0204	200	ND	1	8/2/01	8/2/01	
Anthracene	EPA 8310	C1H0204	2.0	ND	1	8/2/01	8/2/01	
Benzo(a)anthracene	EPA 8310	C1H0204	2.0	ND	1	8/2/01	8/2/01	
Benzo(a)pyrene	EPA 8310	C1H0204	2.0	ND	1	8/2/01	8/2/01	
Benzo(b)fluoranthene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Benzo(g,h,i)perylene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Benzo(k)fluoranthene	EPA 8310	C1H0204	2.0	ND	1	8/2/01	8/2/01	
Chrysene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Dibenzo(a,h)anthracene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Fluoranthene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Fluorene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Naphthalene	EPA 8310	C1H0204	40	ND	1	8/2/01	8/2/01	
Phenanthrene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Pyrene	EPA 8310	C1H0204	5.0	ND	1	8/2/01	8/2/01	
Surrogate: 2-Methylanthracene (35-115%)				*70.6 %*				

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STL Los Angeles
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Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1H010342

Report Number: CKH0016

Sampled:08/01/01
Received:08/01/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg	ug/kg				
Sample ID: CKH0016-06 (Bldg 1-C-13-080101-7 - Soil)								
Acenaphthene	EPA 8310	C1H0204	1000	ND	20	8/2/01	8/2/01	
Acenaphthylene	EPA 8310	C1H0204	4000	ND	20	8/2/01	8/2/01	
Anthracene	EPA 8310	C1H0204	40	**82**	20	8/2/01	8/2/01	
Benzo(a)anthracene	EPA 8310	C1H0204	40	**140**	20	8/2/01	8/2/01	
Benzo(a)pyrene	EPA 8310	C1H0204	40	**150**	20	8/2/01	8/2/01	
Benzo(b)fluoranthene	EPA 8310	C1H0204	100	**210**	20	8/2/01	8/2/01	
Benzo(g,h,i)perylene	EPA 8310	C1H0204	100	ND	20	8/2/01	8/2/01	
Benzo(k)fluoranthene	EPA 8310	C1H0204	40	**110**	20	8/2/01	8/2/01	
Chrysene	EPA 8310	C1H0204	100	**170**	20	8/2/01	8/2/01	
Dibenzo(a,h)anthracene	EPA 8310	C1H0204	100	ND	20	8/2/01	8/2/01	
Fluoranthene	EPA 8310	C1H0204	100	**280**	20	8/2/01	8/2/01	
Fluorene	EPA 8310	C1H0204	100	**130**	20	8/2/01	8/2/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1H0204	100	**120**	20	8/2/01	8/2/01	
Naphthalene	EPA 8310	C1H0204	800	ND	20	8/2/01	8/2/01	
Phenanthrene	EPA 8310	C1H0204	100	**170**	20	8/2/01	8/2/01	
Pyrene	EPA 8310	C1H0204	100	**170**	20	8/2/01	8/2/01	
Surrogate: 2-Methylanthracene (35-115%)				*252 %*				*Z3*
Sample ID: CKH0016-07 (Bldg 1-C-13-080101-8 - Soil)								
Acenaphthene	EPA 8310	C1H0204	1000	**2500**	20	8/2/01	8/2/01	
Acenaphthylene	EPA 8310	C1H0204	4000	ND	20	8/2/01	8/2/01	
Anthracene	EPA 8310	C1H0204	40	**130**	20	8/2/01	8/2/01	
Benzo(a)anthracene	EPA 8310	C1H0204	40	**520**	20	8/2/01	8/2/01	
Benzo(b)fluoranthene	EPA 8310	C1H0204	100	**670**	20	8/2/01	8/2/01	
Benzo(g,h,i)perylene	EPA 8310	C1H0204	100	**500**	20	8/2/01	8/2/01	
Chrysene	EPA 8310	C1H0204	100	**550**	20	8/2/01	8/2/01	
Dibenzo(a,h)anthracene	EPA 8310	C1H0204	100	ND	20	8/2/01	8/2/01	
Fluoranthene	EPA 8310	C1H0204	100	**970**	20	8/2/01	8/2/01	
Fluorene	EPA 8310	C1H0204	100	**190**	20	8/2/01	8/2/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1H0204	100	**460**	20	8/2/01	8/2/01	
Naphthalene	EPA 8310	C1H0204	800	ND	20	8/2/01	8/2/01	
Phenanthrene	EPA 8310	C1H0204	100	**400**	20	8/2/01	8/2/01	
Pyrene	EPA 8310	C1H0204	100	**730**	20	8/2/01	8/2/01	
Surrogate: 2-Methylanthracene (35-115%)				*296 %*				*Z3*

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STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1H010342

Report Number: CKH0016

Sampled:08/01/01
Received:08/01/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg	ug/kg				
Sample ID: CKH0016-07RE1 (Bldg 1-C-13-080101-8 - Soil)								
Benzo(a)pyrene	EPA 8310	C1H0204	160	**830**	80	8/2/01	8/2/01	
Benzo(k)fluoranthene	EPA 8310	C1H0204	160	**530**	80	8/2/01	8/2/01	
Sample ID: CKH0016-08 (Bldg 1-C-13-080101-9 - Soil)								
Acenaphthene	EPA 8310	C1H0204	500	ND	10	8/2/01	8/2/01	
Acenaphthylene	EPA 8310	C1H0204	2000	ND	10	8/2/01	8/2/01	
Anthracene	EPA 8310	C1H0204	20	**37**	10	8/2/01	8/2/01	
Benzo(a)anthracene	EPA 8310	C1H0204	20	**100**	10	8/2/01	8/2/01	
Benzo(a)pyrene	EPA 8310	C1H0204	20	**120**	10	8/2/01	8/2/01	
Benzo(b)fluoranthene	EPA 8310	C1H0204	50	**150**	10	8/2/01	8/2/01	
Benzo(g,h,i)perylene	EPA 8310	C1H0204	50	**120**	10	8/2/01	8/2/01	
Benzo(k)fluoranthene	EPA 8310	C1H0204	20	**76**	10	8/2/01	8/2/01	
Chrysene	EPA 8310	C1H0204	50	ND	10	8/2/01	8/2/01	
Dibenzo(a,h)anthracene	EPA 8310	C1H0204	50	ND	10	8/2/01	8/2/01	
Fluoranthene	EPA 8310	C1H0204	50	**180**	10	8/2/01	8/2/01	
Fluorene	EPA 8310	C1H0204	50	**55**	10	8/2/01	8/2/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1H0204	50	**100**	10	8/2/01	8/2/01	
Naphthalene	EPA 8310	C1H0204	400	ND	10	8/2/01	8/2/01	
Phenanthrene	EPA 8310	C1H0204	50	**81**	10	8/2/01	8/2/01	
Pyrene	EPA 8310	C1H0204	50	**130**	10	8/2/01	8/2/01	
Surrogate: 2-Methylanthracene (35-115%)				*166 %*				*Z3*

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Client Project ID: E1H010342

Report Number: CKH0016

Sampled:08/01/01
Received:08/01/01

METHOD BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: C1H0204 Extracted: 08/02/01										
Blank Analyzed: 08/02/01 (C1H0204-BLK1)										
Acenaphthene	ND	50	ug/kg							
Acenaphthylene	ND	200	ug/kg							
Anthracene	ND	2.0	ug/kg							
Benzo(a)anthracene	ND	2.0	ug/kg							
Benzo(a)pyrene	ND	2.0	ug/kg							
Benzo(b)fluoranthene	ND	5.0	ug/kg							
Benzo(g,h,i)perylene	ND	5.0	ug/kg							
Benzo(k)fluoranthene	ND	2.0	ug/kg							
Chrysene	ND	5.0	ug/kg							
Dibenzo(a,h)anthracene	ND	5.0	ug/kg							
Fluoranthene	ND	5.0	ug/kg							
Fluorene	ND	5.0	ug/kg							
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/kg							
Naphthalene	ND	40	ug/kg							
Phenanthrene	ND	5.0	ug/kg							
Pyrene	ND	5.0	ug/kg							
Surrogate: 2-Methylanthracene	*7.20*		*ug/kg*	*8.00*		*90.0*	*35-115*			
LCS Analyzed: 08/02/01 (C1H0204-BS1)										
Acenaphthene	121	50	ug/kg	160		75.6	45-115			
Acenaphthylene	265	200	ug/kg	320		82.8	50-115			
Anthracene	13.1	2.0	ug/kg	16.0		81.9	55-115			
Benzo(a)anthracene	14.7	2.0	ug/kg	16.0		91.9	65-115			
Benzo(a)pyrene	12.8	2.0	ug/kg	16.0		80.0	55-115			
Benzo(b)fluoranthene	29.5	5.0	ug/kg	32.0		92.2	65-115			
Benzo(g,h,i)perylene	26.7	5.0	ug/kg	32.0		83.4	60-115			
Benzo(k)fluoranthene	13.2	2.0	ug/kg	16.0		82.5	65-115			
Chrysene	13.7	5.0	ug/kg	16.0		85.6	65-115			
Dibenzo(a,h)anthracene	27.9	5.0	ug/kg	32.0		87.2	60-115			
Fluoranthene	28.0	5.0	ug/kg	32.0		87.5	65-115			
Fluorene	27.9	5.0	ug/kg	32.0		87.2	55-115			
Indeno(1,2,3-cd)pyrene	13.6	5.0	ug/kg	16.0		85.0	55-115			
Naphthalene	127	40	ug/kg	160		79.4	45-115			
Phenanthrene	14.3	5.0	ug/kg	16.0		89.4	55-120			
Pyrene	13.8	5.0	ug/kg	16.0		86.2	55-115			

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Attention: Diane Suzuki

Client Project ID: E1H010342

Report Number: CKH0016

Sampled:08/01/01
Received:08/01/01

METHOD BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: C1H0204 Extracted: 08/02/01										
LCS Analyzed: 08/02/01 (C1H0204-BS1)										
Surrogate: 2-Methylanthracene	*7.13*		*ug/kg*	*8.00*		*89.1*	*35-115*			
Matrix Spike Analyzed: 08/02/01 (C1H0204-MS1)					**Source: CKH0016-02**					
Acenaphthene	99.4	50	ug/kg	160	ND	62.1	40-115			
Acenaphthylene	389	200	ug/kg	320	ND	92.5	35-130			
Anthracene	9.81	2.0	ug/kg	16.0	ND	58.4	40-115			
Benzo(a)anthracene	13.8	2.0	ug/kg	16.0	ND	80.6	45-130			
Benzo(a)pyrene	9.35	2.0	ug/kg	16.0	ND	50.9	50-115			
Benzo(b)fluoranthene	27.3	5.0	ug/kg	32.0	ND	81.9	40-130			
Benzo(g,h,i)perylene	24.5	5.0	ug/kg	32.0	ND	76.6	45-115			
Benzo(k)fluoranthene	12.6	2.0	ug/kg	16.0	ND	74.6	40-125			
Chrysene	13.4	5.0	ug/kg	16.0	ND	76.9	45-125			
Dibenzo(a,h)anthracene	25.6	5.0	ug/kg	32.0	ND	75.3	25-130			
Fluoranthene	28.1	5.0	ug/kg	32.0	ND	76.2	50-135			
Fluorene	25.2	5.0	ug/kg	32.0	ND	77.4	35-120			
Indeno(1,2,3-cd)pyrene	12.5	5.0	ug/kg	16.0	ND	71.2	40-120			
Naphthalene	162	40	ug/kg	160	ND	89.4	30-115			
Phenanthrene	18.1	5.0	ug/kg	16.0	ND	95.6	30-160			
Pyrene	13.8	5.0	ug/kg	16.0	ND	76.9	20-165			
Surrogate: 2-Methylanthracene	*4.44*		*ug/kg*	*8.00*		*55.5*	*35-115*			
Matrix Spike Dup Analyzed: 08/02/01 (C1H0204-MSD1)					**Source: CKH0016-02**					
Acenaphthene	108	50	ug/kg	160	ND	67.5	40-115	8.29	25	
Acenaphthylene	379	200	ug/kg	320	ND	89.4	35-130	2.60	25	
Anthracene	10.6	2.0	ug/kg	16.0	ND	63.4	40-115	7.74	25	
Benzo(a)anthracene	14.3	2.0	ug/kg	16.0	ND	83.8	45-130	3.56	20	
Benzo(a)pyrene	9.96	2.0	ug/kg	16.0	ND	54.8	50-115	6.32	20	
Benzo(b)fluoranthene	27.6	5.0	ug/kg	32.0	ND	82.8	40-130	1.09	25	
Benzo(g,h,i)perylene	24.7	5.0	ug/kg	32.0	ND	77.2	45-115	0.813	20	
Benzo(k)fluoranthene	12.7	2.0	ug/kg	16.0	ND	75.2	40-125	0.791	25	
Chrysene	13.6	5.0	ug/kg	16.0	ND	78.1	45-125	1.48	30	
Dibenzo(a,h)anthracene	26.7	5.0	ug/kg	32.0	ND	78.8	25-130	4.21	30	
Fluoranthene	29.7	5.0	ug/kg	32.0	ND	81.2	50-135	5.54	25	
Fluorene	26.6	5.0	ug/kg	32.0	ND	81.8	35-120	5.41	20	
Indeno(1,2,3-cd)pyrene	12.6	5.0	ug/kg	16.0	ND	71.9	40-120	0.797	20	

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Client Project ID: E1H010342

Report Number: CKH0016

Sampled:08/01/01
Received:08/01/01

METHOD BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: C1H0204 Extracted: 08/02/01										
Matrix Spike Dup Analyzed: 08/02/01 (C1H0204-MSD1)					**Source: CKH0016-02**					
Naphthalene	152	40	ug/kg	160	ND	83.1	30-115	6.37	25	
Phenanthrene	15.6	5.0	ug/kg	16.0	ND	80.0	30-160	14.8	30	
Pyrene	14.4	5.0	ug/kg	16.0	ND	80.6	20-165	4.26	20	
Surrogate: 2-Methylanthracene	*4.84*		*ug/kg*	*8.00*		*60.5*	*35-115*			

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles 1721 S. Grand Avenue Santa Ana, CA 92705 Attention: Diane Suzuki	Client Project ID: E1H010342 Report Number: CKH0016	Sampled:08/01/01 Received:08/01/01

DATA QUALIFIERS AND DEFINITIONS

Z3 The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

NR Not reported.

RPD Relative Percent Difference

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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[redacted]

Chain of Custody Record

To: Del Mar Collon

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: STL Los Angeles	Project Manager: Diane Suzuki	Date: 8-1-01	Chain of Custody Number: 054084
Address: STL LOS ANGELES 1721 S. GRAND AVE. SANTA ANA, CA 92705 714-258-8610	Telephone Number (Area Code)/Fax Number: 714 258 8610 Ext 309	Lab Number: E1H0[illegible]	Page 1 of 1
City / State / Zip Code	Site Contact	Lab Contact	
Project Name and Location (State)	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	PAH 8310	Special Instructions/ Conditions of Receipt
SP #13 (Southwest)	8-1-01	9:37				X	X						X	24h TAT
SP #13 (North)	8-1-01	9:45				X	X						X	
Bldg-1-C-13-080101-4	8-1-01	10:03				X	X						X	
Bldg-1-C-13-080101-5	8-1-01	10:05				X	X						X	
Bldg-1-C-13-080101-6	8-1-01	10:08				X	X						X	
Bldg-1-C-13-080101-7	8-1-01	10:11				X	X						X	
Bldg-1-C-13-080101-8	8-1-01	10:14				X	X						X	
Bldg-1-C-13-080101-9	8-1-01	10:16				X	X						X	

Analysis (Attach list if more space is needed)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other_____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Recalde Adriana	8/01/01	17:10	1. Received By: [signature]	8-1-01	17:20
2. Relinquished By: [signature]	8-1-01	18:30	2. Received By: [signature]	8-1-01	[illegible]
3. Relinquished By: [signature]	8/2/01	7:00	3. Received By: [signature]	8-2-01	0700

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

BOE-C6-0233257

Appendix B

BOE-C6-0233258

APPENDIX B

SOIL SCREENING LEVEL (SSL) CALCULATIONS

Site-specific Soil screening Levels (SSLs) Assuming Impacts at Depths of 12 Feet bgs

CAS No.	Chemical	MCL (mg/L)	K_{oc} [1,2]	f_{oc} [3]	K_d [4]	H' [1]	O_w [3]	O_a [3]	P_b [3]	AF_T	Site-specific SSL (mg/kg) at AF_T = 1	Site-specific SSL (mg/kg) at AF_T at D=53' x DAF
100-41-4	Ethylbenzene	7.00E-01	2.0E+02	5.19E-04	--	3.2E-01	2.53E-01	2.07E-01	1.44E+00	13	2.28E-01	6.12E+01
108-88-3	Toluene	1.50E-01	1.4E+02	5.19E-04	--	2.7E-01	2.53E-01	2.07E-01	1.44E+00	13	4.30E-02	1.16E+01
1330-20-7	Xylene (total)	1.75E+00	2.0E+02	5.19E-04	--	3.0E-01	2.53E-01	2.07E-01	1.44E+00	13	5.64E-01	1.52E+02

Notes:

An SSL was not derived for chemicals that do not have promulgated primary MCLs. These chemicals were not included in the assessment of potential for groundwater degradation at concentrations greater than MCLs.

Initial SSL derived using EPA July 1996 Soil Screening Guidance: Technical Background Document, where SSL = MCL (Koc * foc + (Ow + Oa*H'/Pb).
AF_{Tavg} calcuated from LARWQCB May 1996 Interim Site Assessment and Cleanup Guidebook which accounts for attenuation in the soil assuming site-specific soil particle distribution and distance between impacts and groundwater table of 53 feet, and default DAF for EPA SSLs of 20 as presented in EPA July 1996 Soil Screening Guidance: Technical Background Document which accounts for limited groundwater mixing.

AF_{Tavg} = Average attenuation factor based on site lithology (distance to groundwater = 53 feet, 30% sand, 57% silt, and 13% clay).

na = not available
K_{oc} = soil organic carbon-water partition coefficient (L/kg)
f_{oc} = site-specific organic carbon content of soil (kg/kg)
K_d = soil-water partition coefficient (L/kg), K_{oc} x f_{oc}
H' = dimensionless Henry's law constant
O_w = site-specific average water-filled porosity (by volume)
O_a = site-specific average air-filled porosity (by volume)
P_b = dry soil bulk density (kg/L)

[1] Obtained from EPA Region 9 preliminary remediation goal (PRG) physical-chemical data for volatile organic compounds, November 2000
[2] Obtained from Risk Assessment Information System (RAIS) Toxicity & Chemical-Specific Factors Data Base, January 2001, http://risk.lsd.ornl.gov/cgi-bin/tox/TOX_select?select=csf
[3] Site-specific average values
[4] Obtained from EPA Soil Screening Guidance: Technical Background Document (TBD), EPA/540/R-95/128, July 1996, http://www.epa.gov/oerrpage/superfund/resources/soil/toc.htm

BOE-C6-0233260

Geotechnical Parameters for the BRC Former C-6 Facility, Los Angeles, California

Sample ID	Date Sampled	Depth (feet bgs)	Sieve Analysis (Soil Type)	Dry Bulk Density (kg/L)	Moisture Content (percent by weight)	Total Porosity (fraction by volume)	Air-filled Porosity (fraction by volume)	Water-filled Porosity (fraction by volume)	TOC* (mg/kg)	f_{oc} (fraction by weight)
EIA290176-001 (I-34-5)	1/29/2001	5	Silt	1.51	15.9	0.43	0.19	0.24	520	0.0005
EIA290176-010 (D-29-5)	1/29/2001	5	Silt	1.44	20.3	0.46	0.16	0.29	2350	0.0024
EIA29176-018 (I-25-5)	1/29/2001	5	Silt	1.34	17.8	0.49	0.26	0.24	690	0.0007
Average				**1.43**	**18.0**	**0.46**	**0.20**	**0.26**	**1187**	**0.0012**
EIA290176-004 (I-34-20)	1/29/2001	20	Silt	1.54	17.5	0.42	0.15	0.27	330	0.0003
EIA290176-012 (D-29-20)	1/29/2001	20	Silt	1.55	17.0	0.41	0.15	0.26	430	0.0004
EIA29176-021 (I-25-20)	1/29/2001	20	Silt	1.37	20.2	0.48	0.20	0.28	410	0.0004
Average				**1.49**	**18.2**	**0.44**	**0.17**	**0.27**	**390**	**0.0004**
EIA290176-007 (I-34-50)	1/29/2001	50	Fine sand	1.35	4.4	0.51	0.45	0.06	230	0.0002
EIA29176-015 (D-29-50)	1/29/2001	50	Fine sand	1.36	19.5	0.49	0.22	0.26	560	0.0006
EIA29176-024 (I-25-50)	1/29/2001	50	Silt	1.34	24.3	0.51	0.18	0.32	470	0.0005
Average				**1.35**	**16.1**	**0.50**	**0.28**	**0.22**	**420**	**0.0004**
Weighted Fraction by weight (depths 12 to 65 feet bgs)				1.44		0.46	0.21	0.25		0.0005

The weighted fraction by weight assumes the 5-foot sample is representative of the top 20 feet, the 20-foot sample of depths between 20 and 50 feet, and the 50-foot sample of depths between 50 and 65 feet bgs.

Notes:

The laboratory report will be provided as an appendix of the Soil Assessment Report which is being prepared by Kennedy/Jenks, Inc. and will be submitted to the RWQCB under separate cover.

The air-filled porosity values were calculated from gravimetric data, not volumetric data.

* f_{oc} = the weight fraction of organic carbon in soil = TOC/1,000,000

Soil Particle Size Distribution for the BRC Former C-6 Facility, Los Angeles, California

Sample ID	Date Sampled	Depth (feet bgs)	Sieve Analysis (Soil Type)	Median Grain Size (mm)	Particle Size Distribution, wt. Percent						
					Gravel	Sand Size				Silt	Clay
						Coarse	Medium	Fine	TOTAL		
EIA290176-001 (I-34-5)	1/29/2001	5	Silt	0.029	0.00	0.00	0.22	17.60	17.82	69.80	12.37
EIA290176-010 (D-29-5)	1/29/2001	5	Silt	0.027	0.00	0.00	0.02	17.00	17.02	68.41	14.58
EIA29176-018 (I-25-5)	1/29/2001	5	Silt	0.026	0.00	0.00	0.39	14.86	15.25	68.78	15.97
Average									**16.70**	**69.00**	**14.31**
EIA290176-004 (I-34-20)	1/29/2001	20	Silt	0.032	0.00	0.00	0.00	31.19	31.19	54.83	13.99
EIA290176-012 (D-29-20)	1/29/2001	20	Silt	0.036	0.00	0.00	0.90	27.59	28.49	59.67	11.85
EIA29176-021 (I-25-20)	1/29/2001	20	Silt	0.020	0.00	0.00	0.00	11.21	11.21	69.07	19.72
Average									**23.63**	**61.19**	**15.19**
EIA290176-007 (I-34-50)	1/29/2001	50	Fine sand	0.151	0.00	0.00	0.57	79.33	79.90	17.39	2.71
EIA29176-015 (D-29-50)	1/29/2001	50	Fine sand	0.083	0.00	0.00	3.26	47.93	51.19	39.79	9.01
EIA29176-024 (I-25-50)	1/29/2001	50	Silt	0.027	0.00	0.00	0.04	21.27	21.31	64.99	13.70
Average									**50.80**	**40.72**	**8.47**

Weighted Fraction by weight (depths 12 to 65 feet bgs)	0.30	0.57	0.13

The weighted fraction by weight assumes the 5-foot sample is representative of the top 20 feet, the 20-foot sample of depths between 20 and 50 feet, and the 50-foot sample of depths between 50 and 65 feet bgs.