240

BRC Copy

HALEY & ALDRICH

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

TECHNICAL MEMORANDUM

STOCKPILE PLACEMENT/DISPOSITION EVALUATION, PARCEL C STOCKPILES SP-26 THROUGH SP-34

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

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

Date: **April 18, 2002**

Re: **Stockpile Placement/Disposition Evaluation, Boeing Realty Corporation, Parcel C, Stockpiles SP-26 through SP-34**

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-26, SP-27, SP-28, SP-29, SP-30, SP-31, SP-32, SP-33, and SP-34.

OVERVIEW/PURPOSE

Potentially impacted materials identified during soil boring installation/well abandonment activities and 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

Stockpiled soil was created from soil cuttings generated during installation of soil borings or well abandonment. Each of the subject stockpiles was generated in January 2002. Stockpiles SP-26 through SP-30 and Stockpiles SP-32 through SP-34 are comprised of soil cuttings generated during onsite vapor extraction well installation in the Building 1/36 Area. Stockpiles SP-26 through SP-30

each contain approximately 8 cubic yards of soil, and Stockpiles SP-32 through SP-34 each contain approximately 20 cubic yards of soil. Stockpile SP-31 was generated during the abandonment of an onsite groundwater monitoring well and contains approximately 8 cubic yards of soil.

STOCKPILE CHARACTERIZATION METHODOLOGY

One representative discrete soil sample was obtained from each of the Stockpiles SP-26 through SP-34. It is assumed that these samples represent the maximum concentrations of chemicals detected in their respective stockpile. Each of the stockpile samples was analyzed for suspected chemical constituents following the protocols presented in the Los Angeles Regional Water Quality Control Board (LARWQCB)-approved sampling and analysis plan for the subject parcel and the subsequent LARWQCB-approved addenda 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. The stockpile sample results were compared to the representative chemical concentrations used in the SRA for Parcel C. In addition, maximum volatile organic compound (VOC) concentrations for each stockpile were evaluated to assess whether VOC concentrations in the stockpiles have the potential to degrade existing groundwater quality.

Human Health Risk Evaluation

The maximum concentrations detected in each stockpile were compared to either the maximum concentrations or the 95% upper confidence level (95% UCL) detected within Parcel C. Where the stockpile concentrations were greater than the maximum in-situ concentrations or 95% UCL, they were used in the Parcel C sitewide risk assessment calculations to assess whether adding the stockpile to Parcel C resulted in risk above the LARWQCB- and Office of Environmental Health Hazard Assessment (OEHHA)-approved acceptable target risk levels. Haley & Aldrich presented these Parcel C human health risk calculations in a report titled *Soil Investigation, Shallow Soil Remediation and Screening Level Risk Assessment, Boeing Realty Corporation Former C-6 Facility, Parcel C, Los Angeles, California* dated March 2002.

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 VOC 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 U.S. Environmental Protection Agency and LARWQCB methodology and assumptions. This evaluation was conducted by comparing maximum VOC concentrations to site-specific soil screening levels (SSLs) derived from primary MCLs.

BOE-C6-0181046

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 16 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 16 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 Parcel C are exceeded after comparison of the stockpile concentrations to the representative concentrations used in the SRA for Parcel C, 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 and VOC concentrations would not degrade groundwater quality to concentrations greater than MCLs, it is recommended that the stockpile be reused in Parcel C. 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 to 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-C6-0181047

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

Attachments:

Figure 1	Soil Stockpile Reuse Protocol
Table 1	Recommendations for Stockpiles SP-26 through SP-34
Appendix A	Laboratory Reports
Appendix B	Soil Screening Level (SSL) Calculations

BOE-C6-0181048

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

06 May 2002
C6-BRC-T-02-011

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, STOCKPILES SP-26 THROUGH SP-34 FOR BOEING, 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 for Boeing Realty Corporation.

Per our meeting and your verbal approval on February 27, 2002 soil from stockpiles SP-26, SP-27, SP-28, SP-31, SP-32,and SP-34 were reused onsite.

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

Tables

BOE-C6-0181050

Table 1
Recommendations for Stockpiles SP-26 through SP-34
BRC Former C-6 Facility, Los Angeles, California

Stockpile No.	Sample IDs	Approx. Volume	Analyses	Acceptable for Onsite Reuse? (Yes or No)	Recommendations
SP-26	RO#1_1_VEW-17,18	~ 8 cy	Metals, PAHs, VOCs, TPH	Yes	Acceptable for reuse in Parcel C. Addition of analyte 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-27	RO#2_1_VEW_19_25	~ 8 cy	Metals, PAHs, VOCs, TPH	Yes	Acceptable for reuse in Parcel C. Addition of analyte 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-28	RO#3_1_VEW_8_45	~ 8 cy	Metals, PAHs, VOCs, TPH	Yes	Acceptable for reuse in Parcel C. Addition of analyte 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-29	RO#4_VEW_1_60	~ 8 cy	Metals, PAHs, VOCs, TPH	No	Not acceptable for onsite reuse due to elevated arsenic levels. Results from soil samples collected contained arsenic that resulted in estimated health risks above target risk levels. Treat/dispose of offsite at a regulated facility.
SP-30	RO#5_VEW_15_58	~ 8 cy	Metals, PAHs, VOCs, TPH	No	Not acceptable for onsite reuse due to elevated arsenic levels. Results from soil samples collected contained arsenic that resulted in estimated health risks above target risk levels. Treat/dispose of offsite at a regulated facility.

BOE-C6-0181051

Table 1
Recommendations for Stockpiles SP-26 through SP-34
BRC Former C-6 Facility, Los Angeles, California

SP-31	BL-1-10	~ 8 cy	Metals, PAHs, VOCs, TPH	Yes	Acceptable for reuse in Parcel C. Addition of analyte 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-32	RO#7_1_VEW_6_45	~ 20 cy	Metals, PAHs, VOCs, TPH	Yes	Acceptable for reuse in Parcel C. Addition of analyte 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-33	RO#9_1_VEW_7_69	~ 20 cy	Metals, PAHs, VOCs, TPH	No	Not acceptable for onsite reuse due to elevated arsenic levels. Results from soil samples collected contained arsenic that resulted in estimated health risks above target risk levels. Treat/dispose of offsite at a regulated facility.
SP-34	RO#10_1_VEW_21_35	~ 20 cy	Metals, PAHs, VOCs, TPH	Yes	Acceptable for reuse in Parcel C. Addition of analyte 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
VOCs = Volatile Organic Compounds
TPH = Total Petroleum Hydrocarbons
PAHs = Polynuclear Aromatic Hydrocarbons
PCBs = Polychlorinated Biphenyls

BOE-C6-0181052

Figures

BOE-C6-0181053

FORMER C-6 FACILITY
SOIL STOCKPILE RE-USE PROTOCOL

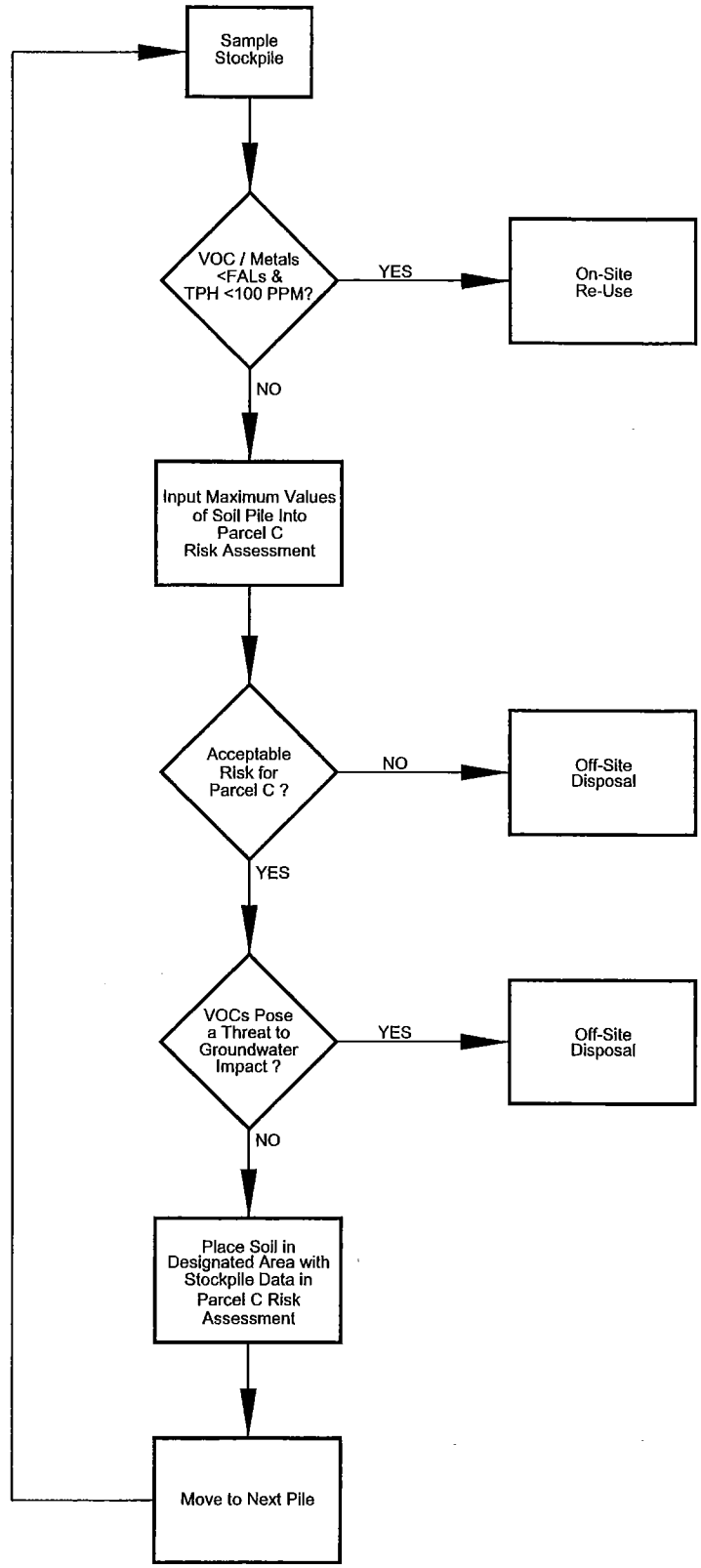

FIGURE 1

HALEY & ALDRICH

Appendix A

BOE-C6-0181055

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

January 21, 2002

STL LOT NUMBER: E2A150278
NELAP 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 eight samples received under chain of custody by STL Los Angeles on January 15, 2002. 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.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. 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

Chain of Custody Record

STL-4124 (0700)

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

Client: HALEY & ALDRICH INC	Project Manager: SCOTT ZACHARY	Date: 1/15/02	Chain of Custody Number: 054113
Address: 9040 FRIARS RD SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number:	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact:	Lab Contact:	
Project Name and Location (State): CG - LOS ANGELES, CA	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 27960-001			

Matrix: Air, Aqueous, Sed., Soil

Containers & Preservatives: Unpres., H2SO4, HNOS, HCl, NaOH, ZnAc/NaOH

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	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	VOCs 8260	TPH 8015	METALS 6010	PAH 8310	HOLD	Special Instructions/ Conditions of Receipt
RO#1 - 1-VEW-17,18	1/10/02	12:40				X							X	X	X	X		
RO#2 - 1-VEW-19-25'	1/11/02	14:20				X							X	X	X	X		
RO#3 - 1-VEW-8-45'	1/12/02	9:00				X							X	X	X	X		
RO#4 - 1-VEW-1-60'	1/14/02	9:45				X							X	X	X	X		
RO#5 - 1-VEW-15-58'	1/14/02	16:10				X							X	X	X	X		
1-VEW-16-15'	1/11/02	17:00				X											X	
1-VEW-20-25'	1/11/02	10:20				X											X	
1-VEW-2-60	1/14/02	13:00				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 NORMAL

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/15/02	14:00	1. Received By: P. Bautista	1-15-02	1400
2. Relinquished By: P. Bautista	1-15-02	1640	2. Received By: [signature]	1-15-02	1640
3. Relinquished By:			3. Received By:		

Comments:

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

000002

BOE-C6-0181058

STL LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 1/15/02

Quantims Lot #: E2A150278
Quote #: 42295
Client Name: Haley & Aldrich
Project: Boeing C-6
Received by:
Date/Time Received:
Delivered by : ☐Client ☐Airborne ☐Fed Ex ☐DHL ☐In-House Courier ☐Rey B. ☐UPS ☐DES ☐Other

Initial / Date

Custody Seal Status: ☐Intact ☐Broken ☒None ..... DR 1/15/02
Custody Seal #(s): ☒No Seal # .....
Sample Container(s): ☒STL-LA ☐Client ☐N/A .....
Temperature(s) (Cooler/blank) in °C: 5.4 Correction factor -0.1°C (Corrected Temp.) 5.3
Thermometer Used : ID: B ☒IR (Infra-red) ☐Digital (Probe) .....
Samples: ☒Intact ☐Broken ☐Other .....
Anomalies: ☒No ☐Yes (See Clouseau) .....
Labeled by RS .....
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) :
8310 to WSAC

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

Fraction	1→8										PH
VOAh /*											N/A
40J-CGJ	2										—

h:HCl na:Sodium Hydoxide znna:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f/l: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 SL:Sleeve
* Number of VOA's w/ Headspace present

LOGGED BY/DATE: Pacolte 1/15/02 REVIEWED BY/DATE:

PRC Ver. 6 081401 KRF

BANACA01\NE\Precis\Sample Control Forms

000003

SEVERN
TRENT
SERVICES

Analytical Report

000004

EXECUTIVE SUMMARY - Detection Highlights

E2A150278

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
RO#1_1_VEW_17,18 01/10/02 12:40 001				
C6-C8	0.20 J	1.0	mg/kg	SW846 8015B
Mercury	0.037 B	0.10	mg/kg	SW846 7471A
Aluminum	17300	20.0	mg/kg	SW846 6010B
Arsenic	5.7	1.0	mg/kg	SW846 6010B
Barium	217	2.0	mg/kg	SW846 6010B
Cadmium	0.27 B	0.50	mg/kg	SW846 6010B
Chromium	24.5 J	1.0	mg/kg	SW846 6010B
Beryllium	0.64 J	0.50	mg/kg	SW846 6010B
Lead	5.1 J	0.50	mg/kg	SW846 6010B
Cobalt	10.4	5.0	mg/kg	SW846 6010B
Copper	22.9 J	2.5	mg/kg	SW846 6010B
Molybdenum	1.3 B	4.0	mg/kg	SW846 6010B
Nickel	16.8	4.0	mg/kg	SW846 6010B
Thallium	0.83 B	1.0	mg/kg	SW846 6010B
Vanadium	50.2	5.0	mg/kg	SW846 6010B
Zinc	62.2	2.0	mg/kg	SW846 6010B
RO#2_1_VEW_19_25 01/11/02 14:20 002				
C6-C8	0.20 J	1.0	mg/kg	SW846 8015B
Mercury	0.10	0.10	mg/kg	SW846 7471A
Aluminum	28100	20.0	mg/kg	SW846 6010B
Arsenic	4.6	1.0	mg/kg	SW846 6010B
Barium	200	2.0	mg/kg	SW846 6010B
Cadmium	1.2	0.50	mg/kg	SW846 6010B
Chromium	40.3 J	1.0	mg/kg	SW846 6010B
Beryllium	1.0 J	0.50	mg/kg	SW846 6010B
Lead	8.6 J	0.50	mg/kg	SW846 6010B
Selenium	0.44 B	0.50	mg/kg	SW846 6010B
Cobalt	14.0	5.0	mg/kg	SW846 6010B
Copper	38.5 J	2.5	mg/kg	SW846 6010B
Molybdenum	0.62 B	4.0	mg/kg	SW846 6010B
Nickel	28.7	4.0	mg/kg	SW846 6010B
Vanadium	71.2	5.0	mg/kg	SW846 6010B
Zinc	93.1	2.0	mg/kg	SW846 6010B
cis-1,2-Dichloroethene	3.8 J	5.0	ug/kg	SW846 8260B
Trichloroethene	17	5.0	ug/kg	SW846 8260B
RO#3_1_VEW_8_45 01/12/02 09:00 003				
C6-C8	0.16 J	1.0	mg/kg	SW846 8015B
Benzo(a)anthracene	9.8 J	16	ug/kg	SW846 8310
Benzo(a)pyrene	12	10	ug/kg	SW846 8310

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E2A150278

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
RO#3_1_VEW_8_45 01/12/02 09:00 003				
Benzo(b)fluoranthene	8.7	4.0	ug/kg	SW846 8310
Benzo(k)fluoranthene	7.1	4.0	ug/kg	SW846 8310
Fluoranthene	13 J	20	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	8.9 J	20	ug/kg	SW846 8310
Phenanthrene	3.4 J	16	ug/kg	SW846 8310
Mercury	0.10	0.10	mg/kg	SW846 7471A
Aluminum	12600	20.0	mg/kg	SW846 6010B
Arsenic	6.0	1.0	mg/kg	SW846 6010B
Barium	84.8	2.0	mg/kg	SW846 6010B
Cadmium	0.11 B	0.50	mg/kg	SW846 6010B
Chromium	17.3 J	1.0	mg/kg	SW846 6010B
Beryllium	0.53 J	0.50	mg/kg	SW846 6010B
Lead	3.8 J	0.50	mg/kg	SW846 6010B
Cobalt	6.2	5.0	mg/kg	SW846 6010B
Copper	17.1 J	2.5	mg/kg	SW846 6010B
Molybdenum	0.44 B	4.0	mg/kg	SW846 6010B
Nickel	12.1	4.0	mg/kg	SW846 6010B
Vanadium	34.3	5.0	mg/kg	SW846 6010B
Zinc	42.7	2.0	mg/kg	SW846 6010B
1,1-Dichloroethene	12	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	1.4 J	5.0	ug/kg	SW846 8260B
Chloroform	1.3 J	5.0	ug/kg	SW846 8260B
Trichloroethene	56	5.0	ug/kg	SW846 8260B
RO#4_1_VEW_1_60 01/14/02 09:45 004				
C6-C8	0.12 J	1.0	mg/kg	SW846 8015B
Benzo(a)pyrene	6.4 J	10	ug/kg	SW846 8310
Benzo(b)fluoranthene	4.4	4.0	ug/kg	SW846 8310
Benzo(k)fluoranthene	3.8 J	4.0	ug/kg	SW846 8310
Fluoranthene	5.4 J	20	ug/kg	SW846 8310
Mercury	0.053 B	0.10	mg/kg	SW846 7471A
Aluminum	17200	20.0	mg/kg	SW846 6010B
Arsenic	37.7	1.0	mg/kg	SW846 6010B
Barium	102	2.0	mg/kg	SW846 6010B
Cadmium	0.36 B	0.50	mg/kg	SW846 6010B
Chromium	30.0 J	1.0	mg/kg	SW846 6010B
Beryllium	0.72 J	0.50	mg/kg	SW846 6010B
Lead	6.1 J	0.50	mg/kg	SW846 6010B
Selenium	0.59	0.50	mg/kg	SW846 6010B
Cobalt	9.8	5.0	mg/kg	SW846 6010B
Copper	24.3 J	2.5	mg/kg	SW846 6010B
Molybdenum	1.1 B	4.0	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E2A150278

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
RO#4_1_VEW_1_60 01/14/02 09:45 004				
Nickel	18.5	4.0	mg/kg	SW846 6010B
Vanadium	49.7	5.0	mg/kg	SW846 6010B
Zinc	63.0	2.0	mg/kg	SW846 6010B
1,1-Dichloroethene	6.6	5.0	ug/kg	SW846 8260B
Trichloroethene	9.2	5.0	ug/kg	SW846 8260B
Toluene	2.1 J	5.0	ug/kg	SW846 8260B
RO#5_1_VEW_15_58 01/14/02 16:10 005				
C6-C8	0.17 J	1.0	mg/kg	SW846 8015B
Mercury	0.043 B	0.10	mg/kg	SW846 7471A
Aluminum	9220	20.0	mg/kg	SW846 6010B
Arsenic	13.9	1.0	mg/kg	SW846 6010B
Barium	49.1	2.0	mg/kg	SW846 6010B
Cadmium	0.23 B	0.50	mg/kg	SW846 6010B
Chromium	18.3 J	1.0	mg/kg	SW846 6010B
Beryllium	0.45 B,J	0.50	mg/kg	SW846 6010B
Lead	3.4 J	0.50	mg/kg	SW846 6010B
Cobalt	6.5	5.0	mg/kg	SW846 6010B
Copper	9.4 J	2.5	mg/kg	SW846 6010B
Molybdenum	0.59 B	4.0	mg/kg	SW846 6010B
Nickel	9.8	4.0	mg/kg	SW846 6010B
Vanadium	30.2	5.0	mg/kg	SW846 6010B
Zinc	35.1	2.0	mg/kg	SW846 6010B

METHODS SUMMARY

E2A150278

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Extractable Petroleum Hydrocarbons	SW846 8015B	SANA AUTO-SHAKE
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E2A150278

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
ERN9A	001	RO#1_1_VEW_17,18	01/10/02	12:40
ERN9P	002	RO#2_1_VEW_19_25	01/11/02	14:20
ERN9R	003	RO#3_1_VEW_8_45	01/12/02	09:00
ERN9T	004	RO#4_1_VEW_1_60	01/14/02	09:45
ERN9W	005	RO#5_1_VEW_15_58	01/14/02	16:10

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: RO#1_1_VEW_17,18

GC Semivolatiles

Lot-Sample #...:	E2A150278-001	Work Order #...:	ERN9A1AA	Matrix.....:	SOLID
Date Sampled...:	01/10/02 12:40	Date Received..:	01/15/02 16:40	MS Run #.....:	2016128
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016317	Analysis Time..:	05:52		
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	82	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: RO#1_1_VEW_17,18

GC Volatiles

Lot-Sample #...:	E2A150278-001	Work Order #...:	ERN9A1AC	Matrix.....:	SOLID
Date Sampled...:	01/10/02 12:40	Date Received..:	01/15/02 16:40	MS Run #.....:	2017163
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2017362	Analysis Time..:	13:29		
Dilution Factor:	1				
Analyst ID.....:	001464	Instrument ID..:	G13		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	0.20 J	1.0	mg/kg	0.10

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

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: RO#1_1_VEW_17,18

GC/MS Volatiles

Lot-Sample #...: E2A150278-001 Work Order #...: ERN9A1AD Matrix.....: SOLID
Date Sampled...: 01/10/02 12:40 Date Received..: 01/15/02 16:40 MS Run #.....: 2021104
Prep Date.....: 01/19/02 Analysis Date..: 01/19/02
Prep Batch #...: 2021322 Analysis Time..: 00:19
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	8.0
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	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
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	2.0
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: RO#1_1_VEW_17,18

GC/MS Volatiles

Lot-Sample #...: E2A150278-001 Work Order #...: ERN9A1AD 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	1.0
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	78	(65 - 135)
1,2-Dichloroethane-d4	79	(60 - 140)
Toluene-d8	86	(70 - 130)

HALEY & ALDRICH INC

Client Sample ID: RO#1_1_VEW_17,18

HPLC

Lot-Sample #...:	E2A150278-001	Work Order #...:	ERN9A1A1	Matrix.....:	SOLID
Date Sampled...:	01/10/02 12:40	Date Received..:	01/15/02 16:40	MS Run #.....:	2016156
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016374	Analysis Time..:	00:29		
Dilution Factor:	1				
Analyst ID.....:	033077	Instrument ID..:	LC7		
		Method.....:	SW846 8310		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	400	ug/kg	63
Acenaphthylene	ND	200	ug/kg	46
Anthracene	ND	8.0	ug/kg	1.1
Benzo(a)anthracene	ND	16	ug/kg	1.7
Benzo(a)pyrene	ND	10	ug/kg	3.1
Benzo(b)fluoranthene	ND	4.0	ug/kg	2.4
Benzo(ghi)perylene	ND	16	ug/kg	3.1
Benzo(k)fluoranthene	ND	4.0	ug/kg	1.1
Chrysene	ND	20	ug/kg	14
Dibenz(a,h)anthracene	ND	40	ug/kg	9.2
Fluoranthene	ND	20	ug/kg	4.8
Fluorene	ND	40	ug/kg	6.7
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg	3.1
Naphthalene	ND	200	ug/kg	23
Phenanthrene	ND	16	ug/kg	2.6
Pyrene	ND	40	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	72	(41 - 115)

HALEY & ALDRICH INC

Client Sample ID: RO#2_1_VEW_19_25

GC Semivolatiles

Lot-Sample #...:	E2A150278-002	Work Order #...:	ERN9P1AD	Matrix.....:	SOLID
Date Sampled...:	01/11/02 14:20	Date Received..:	01/15/02 16:40	MS Run #.....:	2016128
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016317	Analysis Time..:	06:31		
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	88	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: RO#2_1_VEW_19_25

GC Volatiles

Lot-Sample #...:	E2A150278-002	Work Order #...:	ERN9P1AE	Matrix.....:	SOLID
Date Sampled...:	01/11/02 14:20	Date Received..:	01/15/02 16:40	MS Run #.....:	2017163
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2017362	Analysis Time..:	13:57		
Dilution Factor:	1				
Analyst ID.....:	001464	Instrument ID..:	G13		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	0.20 J	1.0	mg/kg	0.10

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

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: RO#2_1_VEW_19_25

GC/MS Volatiles

Lot-Sample #...: E2A150278-002 Work Order #...: ERN9P1AF Matrix.....: SOLID
Date Sampled...: 01/11/02 14:20 Date Received..: 01/15/02 16:40 MS Run #.....: 2021104
Prep Date.....: 01/19/02 Analysis Date..: 01/19/02
Prep Batch #...: 2021322 Analysis Time..: 00:49
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	8.0
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	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
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	**3.8 J**	**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	2.0
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	**17**	**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: RO#2_1_VEW_19_25

GC/MS Volatiles

Lot-Sample #...: E2A150278-002 Work Order #...: ERN9P1AF 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	1.0
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	77	(65 - 135)
1,2-Dichloroethane-d4	78	(60 - 140)
Toluene-d8	85	(70 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: RO#2_1_VEW_19_25

HPLC

Lot-Sample #...:	E2A150278-002	Work Order #...:	ERN9P1AC	Matrix.....:	SOLID
Date Sampled...:	01/11/02 14:20	Date Received..:	01/15/02 16:40	MS Run #.....:	2016156
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016374	Analysis Time..:	01:05		
Dilution Factor:	1				
Analyst ID.....:	033077	Instrument ID..:	LC7		
		Method.....:	SW846 8310		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	400	ug/kg	63
Acenaphthylene	ND	200	ug/kg	46
Anthracene	ND	8.0	ug/kg	1.1
Benzo(a)anthracene	ND	16	ug/kg	1.7
Benzo(a)pyrene	ND	10	ug/kg	3.1
Benzo(b)fluoranthene	ND	4.0	ug/kg	2.4
Benzo(ghi)perylene	ND	16	ug/kg	3.1
Benzo(k)fluoranthene	ND	4.0	ug/kg	1.1
Chrysene	ND	20	ug/kg	14
Dibenz(a,h)anthracene	ND	40	ug/kg	9.2
Fluoranthene	ND	20	ug/kg	4.8
Fluorene	ND	40	ug/kg	6.7
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg	3.1
Naphthalene	ND	200	ug/kg	23
Phenanthrene	ND	16	ug/kg	2.6
Pyrene	ND	40	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	66	(41 - 115)

HALEY & ALDRICH INC

Client Sample ID: RO#3_1_VEW_8_45

GC Semivolatiles

Lot-Sample #...:	E2A150278-003	Work Order #...:	ERN9R1AD	Matrix.....:	SOLID
Date Sampled...:	01/12/02 09:00	Date Received..:	01/15/02 16:40	MS Run #.....:	2016128
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016317	Analysis Time..:	07:10		
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	90	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: RO#3_1_VEW_8_45

GC Volatiles

Lot-Sample #...:	E2A150278-003	Work Order #...:	ERN9R1AE	Matrix.....:	SOLID
Date Sampled...:	01/12/02 09:00	Date Received..:	01/15/02 16:40	MS Run #.....:	2017163
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2017362	Analysis Time..:	14:25		
Dilution Factor:	1				
Analyst ID.....:	001464	Instrument ID..:	G13		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	0.16 J	1.0	mg/kg	0.10

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

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: RO#3_1_VEW_8_45

GC/MS Volatiles

Lot-Sample #...: E2A150278-003 Work Order #...: ERN9R1AF Matrix.....: SOLID
Date Sampled...: 01/12/02 09:00 Date Received..: 01/15/02 16:40 MS Run #.....: 2021104
Prep Date.....: 01/19/02 Analysis Date..: 01/19/02
Prep Batch #...: 2021322 Analysis Time..: 01:19
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	8.0
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	**12**	**5.0**	**ug/kg**	**2.0**
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
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	**1.4 J**	**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	**1.3 J**	**5.0**	**ug/kg**	**1.0**
Tetrahydrofuran	ND	20	ug/kg	2.0
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	**56**	**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: RO#3_1_VEW_8_45

GC/MS Volatiles

Lot-Sample #...: E2A150278-003 Work Order #...: ERN9R1AF 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	1.0
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	80	(65 - 135)
1,2-Dichloroethane-d4	84	(60 - 140)
Toluene-d8	88	(70 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: RO#3_1_VEW_8_45

HPLC

Lot-Sample #...:	E2A150278-003	Work Order #...:	ERN9R1AC	Matrix.....:	SOLID
Date Sampled...:	01/12/02 09:00	Date Received..:	01/15/02 16:40	MS Run #.....:	2016156
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016374	Analysis Time..:	01:40		
Dilution Factor:	1				
Analyst ID.....:	033077	Instrument ID..:	LC7		
		Method.....:	SW846 8310		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	400	ug/kg	63
Acenaphthylene	ND	200	ug/kg	46
Anthracene	ND	8.0	ug/kg	1.1
Benzo(a)anthracene	**9.8 J**	**16**	**ug/kg**	**1.7**
Benzo(a)pyrene	**12**	**10**	**ug/kg**	**3.1**
Benzo(b)fluoranthene	**8.7**	**4.0**	**ug/kg**	**2.4**
Benzo(ghi)perylene	ND	16	ug/kg	3.1
Benzo(k)fluoranthene	**7.1**	**4.0**	**ug/kg**	**1.1**
Chrysene	ND	20	ug/kg	14
Dibenz(a,h)anthracene	ND	40	ug/kg	9.2
Fluoranthene	**13 J**	**20**	**ug/kg**	**4.8**
Fluorene	ND	40	ug/kg	6.7
Indeno(1,2,3-cd)pyrene	**8.9 J**	**20**	**ug/kg**	**3.1**
Naphthalene	ND	200	ug/kg	23
Phenanthrene	**3.4 J**	**16**	**ug/kg**	**2.6**
Pyrene	ND	40	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	75	(41 - 115)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: RO#4_1_VEW_1_60

GC Semivolatiles

Lot-Sample #...:	E2A150278-004	Work Order #...:	ERN9T1AD	Matrix.....:	SOLID
Date Sampled...:	01/14/02 09:45	Date Received..:	01/15/02 16:40	MS Run #.....:	2016128
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016317	Analysis Time..:	10:58		
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: RO#4_1_VEW_1_60

GC Volatiles

Lot-Sample #...:	E2A150278-004	Work Order #...:	ERN9T1AE	Matrix.....:	SOLID
Date Sampled...:	01/14/02 09:45	Date Received..:	01/15/02 16:40	MS Run #.....:	2017163
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2017362	Analysis Time..:	15:24		
Dilution Factor:	1				
Analyst ID.....:	001464	Instrument ID..:	G13		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	0.12 J	1.0	mg/kg	0.10

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

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: RO#4_1_VEW_1_60

GC/MS Volatiles

Lot-Sample #...: E2A150278-004 Work Order #...: ERN9T1AF Matrix.....: SOLID
Date Sampled...: 01/14/02 09:45 Date Received..: 01/15/02 16:40 MS Run #.....: 2021104
Prep Date.....: 01/19/02 Analysis Date..: 01/19/02
Prep Batch #...: 2021322 Analysis Time..: 01:49
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	8.0
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	**6.6**	**5.0**	**ug/kg**	**2.0**
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
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	2.0
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	**9.2**	**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	**2.1 J**	**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: RO#4_1_VEW_1_60

GC/MS Volatiles

Lot-Sample #...: E2A150278-004 Work Order #...: ERN9T1AF 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	1.0
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	77	(65 - 135)
1,2-Dichloroethane-d4	82	(60 - 140)
Toluene-d8	85	(70 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: RO#4_1_VEW_1_60

HPLC

Lot-Sample #...:	E2A150278-004	Work Order #...:	ERN9T1AC	Matrix.....:	SOLID
Date Sampled...:	01/14/02 09:45	Date Received..:	01/15/02 16:40	MS Run #.....:	2016156
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016374	Analysis Time..:	02:16		
Dilution Factor:	1				
Analyst ID.....:	033077	Instrument ID..:	LC7		
		Method.....:	SW846 8310		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	400	ug/kg	63
Acenaphthylene	ND	200	ug/kg	46
Anthracene	ND	8.0	ug/kg	1.1
Benzo(a)anthracene	ND	16	ug/kg	1.7
Benzo(a)pyrene	**6.4 J**	**10**	**ug/kg**	**3.1**
Benzo(b)fluoranthene	**4.4**	**4.0**	**ug/kg**	**2.4**
Benzo(ghi)perylene	ND	16	ug/kg	3.1
Benzo(k)fluoranthene	**3.8 J**	**4.0**	**ug/kg**	**1.1**
Chrysene	ND	20	ug/kg	14
Dibenz(a,h)anthracene	ND	40	ug/kg	9.2
Fluoranthene	**5.4 J**	**20**	**ug/kg**	**4.8**
Fluorene	ND	40	ug/kg	6.7
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg	3.1
Naphthalene	ND	200	ug/kg	23
Phenanthrene	ND	16	ug/kg	2.6
Pyrene	ND	40	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	71	(41 - 115)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: RO#5_1_VEW_15_58

GC Semivolatiles

Lot-Sample #...:	E2A150278-005	Work Order #...:	ERN9W1AD	Matrix.....:	SOLID
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2016128
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2016317	Analysis Time..:	19:14		
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	84	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: RO#5_1_VEW_15_58

GC Volatiles

Lot-Sample #...:	E2A150278-005	Work Order #...:	ERN9W1AE	Matrix.....:	SOLID
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2017163
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2017362	Analysis Time..:	15:52		
Dilution Factor:	1				
Analyst ID.....:	001464	Instrument ID..:	G13		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	0.17 J	1.0	mg/kg	0.10

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

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: RO#5_1_VEW_15_58

GC/MS Volatiles

Lot-Sample #...:	E2A150278-005	Work Order #...:	ERN9W1AF	Matrix.....:	SOLID
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2021104
Prep Date.....:	01/19/02	Analysis Date..:	01/19/02		
Prep Batch #...:	2021322	Analysis Time..:	02:19		
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	8.0
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	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
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	2.0
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: RO#5_1_VEW_15_58

GC/MS Volatiles

Lot-Sample #...: E2A150278-005 Work Order #...: ERN9W1AF 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	1.0
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	77	(65 - 135)
1,2-Dichloroethane-d4	82	(60 - 140)
Toluene-d8	86	(70 - 130)

HALEY & ALDRICH INC

Client Sample ID: RO#5_1_VEW_15_58

HPLC

Lot-Sample #...:	E2A150278-005	Work Order #...:	ERN9W1AC	Matrix.....:	SOLID
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2016156
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016374	Analysis Time..:	02:51		
Dilution Factor:	1				
Analyst ID.....:	033077	Instrument ID..:	LC7		
		Method.....:	SW846 8310		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	400	ug/kg	63
Acenaphthylene	ND	200	ug/kg	46
Anthracene	ND	8.0	ug/kg	1.1
Benzo(a)anthracene	ND	16	ug/kg	1.7
Benzo(a)pyrene	ND	10	ug/kg	3.1
Benzo(b)fluoranthene	ND	4.0	ug/kg	2.4
Benzo(ghi)perylene	ND	16	ug/kg	3.1
Benzo(k)fluoranthene	ND	4.0	ug/kg	1.1
Chrysene	ND	20	ug/kg	14
Dibenz(a,h)anthracene	ND	40	ug/kg	9.2
Fluoranthene	ND	20	ug/kg	4.8
Fluorene	ND	40	ug/kg	6.7
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg	3.1
Naphthalene	ND	200	ug/kg	23
Phenanthrene	ND	16	ug/kg	2.6
Pyrene	ND	40	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	79	(41 - 115)

HALEY & ALDRICH INC

RO#1_1_VEW_17,18

GC/MS Volatiles

Lot-Sample #: E2A150278-001 Work Order #: ERN9A1AD Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

RO#2_1_VEW_19_25

GC/MS Volatiles

Lot-Sample #: E2A150278-002 Work Order #: ERN9P1AF Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

RO#3_1_VEW_8_45

GC/MS Volatiles

Lot-Sample #: E2A150278-003 Work Order #: ERN9R1AF Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

RO#4_1_VEW_1_60

GC/MS Volatiles

Lot-Sample #: E2A150278-004 Work Order #: ERN9T1AF Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

RO#5_1_VEW_15_58

GC/MS Volatiles

Lot-Sample #: E2A150278-005 Work Order #: ERN9W1AF Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Method Blank Report

GC/MS Volatiles

Lot-Sample #: E2A210000-322 B Work Order #: ER09N1AA Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown hydrocarbon		8.7	M	21.353	ug/kg
Unknown alkane		7.4	M	21.599	ug/kg

NOTE(S):

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

HALEY & ALDRICH INC

Client Sample ID: RO#1_1_VEW_17,18

TOTAL Metals

Lot-Sample #...: E2A150278-001 Matrix.....: SOLID
Date Sampled...: 01/10/02 12:40 Date Received..: 01/15/02 16:40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2016399						
Aluminum	17300	20.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AE
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 8.0	
Arsenic	5.7	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AF
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AG
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.60	
Barium	217	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AH
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Cadmium	0.27 B	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AJ
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.060	
Chromium	24.5 J	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AK
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Beryllium	0.64 J	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AL
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.050	
Lead	5.1 J	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AM
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AN
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: RO#1_1_VEW_17,18

TOTAL Metals

Lot-Sample #...: E2A150278-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AP
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Cobalt	10.4	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AQ
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Copper	22.9 J	2.5	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AR
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	
Molybdenum	1.3 B	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AT
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Nickel	16.8	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AU
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Thallium	0.83 B	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AV
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.80	
Vanadium	50.2	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AW
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Zinc	62.2	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9A1AX
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 1.0	
Prep Batch #...: 2016402						
Mercury	0.037 B	0.10	mg/kg	SW846 7471A	01/16-01/17/02	ERN9A1A0
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 2016185	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

HALEY & ALDRICH INC

Client Sample ID: RO#2_1_VEW_19_25

TOTAL Metals

Lot-Sample #...: E2A150278-002 Matrix.....: SOLID
Date Sampled...: 01/11/02 14:20 Date Received..: 01/15/02 16:40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2016399						
Aluminum	28100	20.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AG
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 8.0	
Arsenic	4.6	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AH
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AJ
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.60	
Barium	200	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AK
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Cadmium	1.2	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AL
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.060	
Chromium	40.3 J	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AM
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Beryllium	1.0 J	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AN
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.050	
Lead	8.6 J	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AP
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Selenium	0.44 B	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AQ
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: RO#2_1_VEW_19_25

TOTAL Metals

Lot-Sample #...: E2A150278-002 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AR
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Cobalt	14.0	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AT
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Copper	38.5 J	2.5	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AU
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	
Molybdenum	0.62 B	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AV
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Nickel	28.7	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AW
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1AX
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.80	
Vanadium	71.2	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1A0
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Zinc	93.1	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9P1A1
		Dilution Factor: 1		Analysis Time..: 20:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 1.0	
Prep Batch #...: 2016402						
Mercury	0.10	0.10	mg/kg	SW846 7471A	01/16-01/17/02	ERN9P1AA
		Dilution Factor: 1		Analysis Time..: 15:30	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 2016185	MDL.....: 0.020	

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: RO#3_1_VEW_8_45

TOTAL Metals

Lot-Sample #...: E2A150278-003 Matrix.....: SOLID
Date Sampled...: 01/12/02 09:00 Date Received..: 01/15/02 16:40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2016399						
Aluminum	12600	20.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AG
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 8.0	
Arsenic	6.0	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AH
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AJ
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.60	
Barium	84.8	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AK
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Cadmium	0.11 B	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AL
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.060	
Chromium	17.3 J	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AM
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Beryllium	0.53 J	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AN
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.050	
Lead	3.8 J	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AP
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AQ
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: RO#3_1_VEW_8_45

TOTAL Metals

Lot-Sample #...: E2A150278-003 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AR
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Cobalt	6.2	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AT
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Copper	17.1 J	2.5	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AU
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	
Molybdenum	0.44 B	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AV
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Nickel	12.1	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AW
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1AX
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.80	
Vanadium	34.3	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1A0
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Zinc	42.7	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9R1A1
		Dilution Factor: 1		Analysis Time..: 20:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 1.0	
Prep Batch #...: 2016402						
Mercury	0.10	0.10	mg/kg	SW846 7471A	01/16-01/17/02	ERN9R1AA
		Dilution Factor: 1		Analysis Time..: 15:32	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 2016185	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

HALEY & ALDRICH INC

Client Sample ID: RO#4_1_VEW_1_60

TOTAL Metals

Lot-Sample #...: E2A150278-004 Matrix.....: SOLID
Date Sampled...: 01/14/02 09:45 Date Received..: 01/15/02 16:40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2016399						
Aluminum	17200	20.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AG
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 8.0	
Arsenic	37.7	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AH
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AJ
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.60	
Barium	102	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AK
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Cadmium	0.36 B	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AL
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.060	
Chromium	30.0 J	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AM
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Beryllium	0.72 J	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AN
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.050	
Lead	6.1 J	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AP
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Selenium	0.59	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AQ
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: RO#4_1_VEW_1_60

TOTAL Metals

Lot-Sample #...: E2A150278-004 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AR
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Cobalt	9.8	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AT
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Copper	24.3 J	2.5	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AU
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	
Molybdenum	1.1 B	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AV
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Nickel	18.5	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AW
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1AX
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.80	
Vanadium	49.7	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1A0
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Zinc	63.0	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9T1A1
		Dilution Factor: 1		Analysis Time..: 20:44	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 1.0	
Prep Batch #...: 2016402						
Mercury	0.053 B	0.10	mg/kg	SW846 7471A	01/16-01/17/02	ERN9T1AA
		Dilution Factor: 1		Analysis Time..: 15:34	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 2016185	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

HALEY & ALDRICH INC

Client Sample ID: RO#5_1_VEW_15_58

TOTAL Metals

Lot-Sample #...: E2A150278-005
Date Sampled...: 01/14/02 16:10 Date Received..: 01/15/02 16:40
Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2016399						
Aluminum	9220	20.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AG
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 8.0	
Arsenic	13.9	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AH
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AJ
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.60	
Barium	49.1	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AK
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Cadmium	0.23 B	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AL
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.060	
Chromium	18.3 J	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AM
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Beryllium	0.45 B,J	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AN
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.050	
Lead	3.4 J	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AP
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AQ
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: RO#5_1_VEW_15_58

TOTAL Metals

Lot-Sample #...: E2A150278-005 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AR
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Cobalt	6.5	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AT
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Copper	9.4 J	2.5	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AU
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.40	
Molybdenum	0.59 B	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AV
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Nickel	9.8	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AW
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1AX
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.80	
Vanadium	30.2	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1A0
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Zinc	35.1	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERN9W1A1
		Dilution Factor: 1		Analysis Time..: 20:52	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 1.0	
Prep Batch #...: 2016402						
Mercury	0.043 B	0.10	mg/kg	SW846 7471A	01/16-01/17/02	ERN9W1AA
		Dilution Factor: 1		Analysis Time..: 15:36	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 2016185	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

SEVERN
TRENT
SERVICES

QA/QC

000051

QC DATA ASSOCIATION SUMMARY

E2A150278

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 8015B		2016317	2016128
	SOLID	SW846 8015B		2017362	2017163
	SOLID	SW846 7471A		2016402	2016185
	SOLID	SW846 8260B		2021322	2021104
	SOLID	SW846 6010B		2016399	2016183
	SOLID	SW846 8310		2016374	2016156
002	SOLID	SW846 8015B		2016317	2016128
	SOLID	SW846 8015B		2017362	2017163
	SOLID	SW846 7471A		2016402	2016185
	SOLID	SW846 8260B		2021322	2021104
	SOLID	SW846 6010B		2016399	2016183
	SOLID	SW846 8310		2016374	2016156
003	SOLID	SW846 8015B		2016317	2016128
	SOLID	SW846 8015B		2017362	2017163
	SOLID	SW846 7471A		2016402	2016185
	SOLID	SW846 8260B		2021322	2021104
	SOLID	SW846 6010B		2016399	2016183
	SOLID	SW846 8310		2016374	2016156
004	SOLID	SW846 8015B		2016317	2016128
	SOLID	SW846 8015B		2017362	2017163
	SOLID	SW846 7471A		2016402	2016185
	SOLID	SW846 8260B		2021322	2021104
	SOLID	SW846 6010B		2016399	2016183
	SOLID	SW846 8310		2016374	2016156
005	SOLID	SW846 8015B		2016317	2016128
	SOLID	SW846 8015B		2017362	2017163
	SOLID	SW846 7471A		2016402	2016185
	SOLID	SW846 8260B		2021322	2021104
	SOLID	SW846 6010B		2016399	2016183
	SOLID	SW846 8310		2016374	2016156

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E2A150278
MB Lot-Sample #: E2A160000-317

Work Order #...: ERQMR1AA

Matrix.....: SOLID

Prep Date.....: 01/16/02
Prep Batch #...: 2016317

Analysis Date..: 01/18/02
Dilution Factor: 1

Analysis Time..: 16:35
Instrument ID..: G02

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	94	(60 - 130)

NOTE(S):

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

METHOD BLANK REPORT

HPLC

Client Lot #...: E2A150278
MB Lot-Sample #: G2A160000-374

Work Order #...: ERQ3W1AA

Matrix.....: SOLID

Prep Date.....: 01/16/02
Prep Batch #...: 2016374

Analysis Time..: 22:43
Instrument ID..: LC7

Analysis Date..: 01/17/02
Dilution Factor: 1

Analyst ID.....: 033077

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	75	(41 - 115)

NOTE(S):

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

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E2A150278
MB Lot-Sample #: E2A170000-362

Work Order #...: ERT7G1AA

Matrix.....: SOLID

Prep Date.....: 01/16/02
Prep Batch #...: 2017362

Analysis Time..: 11:09
Instrument ID..: G13

Analysis Date..: 01/16/02
Dilution Factor: 1

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)	83	(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 #...: E2A150278
MB Lot-Sample #: E2A210000-322

Work Order #...: ER09N1AA

Matrix.....: SOLID

Prep Date.....: 01/18/02

Analysis Time..: 23:18

Analysis Date...: 01/18/02

Prep Batch #...: 2021322

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

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2A150278 Work Order #...: ER09N1AA 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	78	(65 - 135)
1,2-Dichloroethane-d4	80	(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 #...: E2A150278 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E2A160000-399 Prep Batch #...: 2016399						
Aluminum	ND	20.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1CF
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AA
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AC
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	ND	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AD
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	ND	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AE
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	0.14 B	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AF
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	0.092 B	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AG
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	0.42 B	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AH
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AJ
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AK
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AL
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E2A150278 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	0.63 B	2.5	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AM
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	ND	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AN
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AP
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AQ
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AR
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AT
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	

MB Lot-Sample #: E2A160000-402 **Prep Batch #...:** 2016402

Mercury	ND	0.10	mg/kg	SW846 7471A	01/16-01/17/02	ERQ8K1AA
		Dilution Factor: 1				
		Analysis Time..: 14:39		Analyst ID.....: 000023	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 #...: E2A150278 Work Order #...: ERQMR1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A160000-317
Prep Date.....: 01/16/02 Analysis Date..: 01/16/02
Prep Batch #...: 2016317 Analysis Time..: 17:56
Dilution Factor: 1 Instrument ID..: G02
Analyst ID.....: 356074

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Diesel)	250	207	mg/kg	83	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	85	(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

HPLC

Client Lot #...: E2A150278 Work Order #...: ERQ3W1AC Matrix.....: SOLID
LCS Lot-Sample#: G2A160000-374
Prep Date.....: 01/16/02 Analysis Date..: 01/17/02
Prep Batch #...: 2016374 Analysis Time..: 23:18
Dilution Factor: 1 Instrument ID..: LC7
Analyst ID.....: 033077

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Acenaphthene	1330	1030	ug/kg	77	SW846 8310
Acenaphthylene	667	462	ug/kg	69	SW846 8310
Anthracene	26.6	15.6	ug/kg	59	SW846 8310
Benzo(a)anthracene	66.7	50.3	ug/kg	75	SW846 8310
Benzo(a)pyrene	**66.7**	**46.2**	**ug/kg**	**69**	**SW846 8310**
Benzo(b)fluoranthene	26.6	18.9	ug/kg	71	SW846 8310
Benzo(ghi)perylene	106	76.0	ug/kg	71	SW846 8310
Benzo(k)fluoranthene	26.6	19.0	ug/kg	71	SW846 8310
Chrysene	66.7	50.0	ug/kg	75	SW846 8310
Dibenz(a,h)anthracene	266	170	ug/kg	64	SW846 8310
Fluoranthene	66.7	44.2	ug/kg	66	SW846 8310
Fluorene	**133**	**60.4**	**ug/kg**	**45**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**66.7**	**47.9**	**ug/kg**	**72**	**SW846 8310**
Naphthalene	**667**	**425**	**ug/kg**	**64**	**SW846 8310**
Phenanthrene	53.2	29.1	ug/kg	55	SW846 8310
Pyrene	**133**	**90.1**	**ug/kg**	**68**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	75	(41 - 115)

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 #...: E2A150278 Work Order #...: ERT7G1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A170000-362
Prep Date.....: 01/16/02 Analysis Date..: 01/16/02
Prep Batch #...: 2017362 Analysis Time..: 11:37
Dilution Factor: 1 Instrument ID..: G13
Analyst ID.....: 001464

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Gasoline)	5.00	4.94	mg/kg	99	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	112	(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 #...: E2A150278 Work Order #...: ER09N1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A210000-322
Prep Date.....: 01/18/02 Analysis Date..: 01/18/02
Prep Batch #...: 2021322 Analysis Time..: 22:48
Dilution Factor: 1 Instrument ID..: MSD
Analyst ID.....: 999998

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	50.0	52.0	ug/kg	104	SW846 8260B
Benzene	50.0	54.4	ug/kg	109	SW846 8260B
Trichloroethene	50.0	52.9	ug/kg	106	SW846 8260B
Toluene	50.0	50.1	ug/kg	100	SW846 8260B
Chlorobenzene	50.0	51.1	ug/kg	102	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	81	(65 - 135)
1,2-Dichloroethane-d4	88	(60 - 140)
Toluene-d8	85	(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 #...: E2A150278 Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E2A160000-399 Prep Batch #...: 2016399							
Arsenic	200	188	mg/kg	94	SW846 6010B	01/16-01/17/02	ERQ7T1AU
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Aluminum	200	182	mg/kg	91	SW846 6010B	01/16-01/17/02	ERQ7T1CG
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	50.0	45.2	mg/kg	90	SW846 6010B	01/16-01/17/02	ERQ7T1AV
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	200	189	mg/kg	94	SW846 6010B	01/16-01/17/02	ERQ7T1AW
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	5.00	4.87	mg/kg	97	SW846 6010B	01/16-01/17/02	ERQ7T1AX
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	20.0	20.2	mg/kg	101	SW846 6010B	01/16-01/17/02	ERQ7T1A0
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	5.00	5.14	mg/kg	103	SW846 6010B	01/16-01/17/02	ERQ7T1A1
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	50.0	47.4	mg/kg	95	SW846 6010B	01/16-01/17/02	ERQ7T1A2
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	200	174	mg/kg	87	SW846 6010B	01/16-01/17/02	ERQ7T1A3
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Silver	5.00	4.74	mg/kg	95	SW846 6010B	01/16-01/17/02	ERQ7T1A4
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2A150278 Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	50.0	48.3	mg/kg	97	SW846 6010B	01/16-01/17/02	ERQ7T1A5
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Copper	25.0	23.3	mg/kg	93	SW846 6010B	01/16-01/17/02	ERQ7T1A6
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	100	97.8	mg/kg	98	SW846 6010B	01/16-01/17/02	ERQ7T1A7
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	50.0	48.0	mg/kg	96	SW846 6010B	01/16-01/17/02	ERQ7T1A8
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	200	187	mg/kg	93	SW846 6010B	01/16-01/17/02	ERQ7T1A9
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	50.0	49.4	mg/kg	99	SW846 6010B	01/16-01/17/02	ERQ7T1CA
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	50.0	49.7	mg/kg	99	SW846 6010B	01/16-01/17/02	ERQ7T1CC
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	

LCS Lot-Sample#: E2A160000-402 Prep Batch #...: 2016402

Mercury	0.833	0.808	mg/kg	97	SW846 7471A	01/16-01/17/02	ERQ8K1AC
			Dilution Factor: 1				
			Analysis Time..: 14:41		Analyst ID.....: 000023	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 #...: E2A150278 Work Order #...: ERQMR1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A160000-317
Prep Date.....: 01/16/02 Analysis Date..: 01/16/02
Prep Batch #...: 2016317 Analysis Time..: 17:56
Dilution Factor: 1 Instrument ID..: G02
Analyst ID.....: 356074

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**83**	**(55 - 130)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	85	(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

HPLC

Client Lot #...: E2A150278 Work Order #...: ERQ3W1AC Matrix.....: SOLID
LCS Lot-Sample#: G2A160000-374
Prep Date.....: 01/16/02 Analysis Date..: 01/17/02
Prep Batch #...: 2016374 Analysis Time..: 23:18
Dilution Factor: 1 Instrument ID..: LC7
Analyst ID.....: 033077

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	77	(50 - 150)	SW846 8310
Acenaphthylene	69	(50 - 150)	SW846 8310
Anthracene	59	(50 - 150)	SW846 8310
Benzo(a)anthracene	75	(50 - 150)	SW846 8310
Benzo(a)pyrene	**69**	**(49 - 107)**	**SW846 8310**
Benzo(b)fluoranthene	71	(50 - 150)	SW846 8310
Benzo(ghi)perylene	71	(50 - 150)	SW846 8310
Benzo(k)fluoranthene	71	(50 - 150)	SW846 8310
Chrysene	75	(50 - 150)	SW846 8310
Dibenz(a,h)anthracene	64	(50 - 150)	SW846 8310
Fluoranthene	66	(50 - 150)	SW846 8310
Fluorene	**45**	**(43 - 112)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**72**	**(54 - 114)**	**SW846 8310**
Naphthalene	**64**	**(44 - 110)**	**SW846 8310**
Phenanthrene	55	(50 - 150)	SW846 8310
Pyrene	**68**	**(49 - 115)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	75	(41 - 115)

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 #...: E2A150278 Work Order #...: ERT7G1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A170000-362
Prep Date.....: 01/16/02 Analysis Date..: 01/16/02
Prep Batch #...: 2017362 Analysis Time..: 11:37
Dilution Factor: 1 Instrument ID..: G13
Analyst ID.....: 001464

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Gasoline)	99	(70 - 140)	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	112	(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 #...: E2A150278 Work Order #...: ER09N1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A210000-322
Prep Date.....: 01/18/02 Analysis Date..: 01/18/02
Prep Batch #...: 2021322 Analysis Time..: 22:48
Dilution Factor: 1 Instrument ID..: MSD
Analyst ID.....: 999998

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	104	(65 - 150)	SW846 8260B
Benzene	109	(70 - 130)	SW846 8260B
Trichloroethene	106	(70 - 135)	SW846 8260B
Toluene	100	(70 - 130)	SW846 8260B
Chlorobenzene	102	(70 - 130)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	81	(65 - 135)
1,2-Dichloroethane-d4	88	(60 - 140)
Toluene-d8	85	(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 #...: E2A150278 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E2A160000-399 Prep Batch #...: 2016399					
Arsenic	94	(75 - 115)	SW846 6010B	01/16-01/17/02	ERQ7T1AU
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Aluminum	91	(70 - 115)	SW846 6010B	01/16-01/17/02	ERQ7T1CG
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	90	(75 - 115)	SW846 6010B	01/16-01/17/02	ERQ7T1AV
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Barium	94	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1AW
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	97	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1AX
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	101	(85 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A0
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	103	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A1
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Lead	95	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A2
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	87	(70 - 115)	SW846 6010B	01/16-01/17/02	ERQ7T1A3
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Silver	95	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A4
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2A150278 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	97	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A5
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Copper	93	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A6
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	98	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A7
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	96	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A8
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	93	(75 - 125)	SW846 6010B	01/16-01/17/02	ERQ7T1A9
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	99	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1CA
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	99	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1CC
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	

LCS Lot-Sample#: E2A160000-402 Prep Batch #...: 2016402

Mercury	97	(85 - 115)	SW846 7471A	01/16-01/17/02	ERQ8K1AC
		Dilution Factor: 1			
		Analysis Time..: 14:41	Analyst ID.....: 000023	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 #...: E2A150278 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E2A140199-001 Prep Batch #...: 2016399									
Aluminum									
	21800	200	26200 N	mg/kg			SW846 6010B	01/16-01/17/02	ERMDP1C8
	21800	200	25600 N	mg/kg			SW846 6010B	01/16-01/17/02	ERMDP1C9
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Arsenic									
	16.6	200	205	mg/kg	94		SW846 6010B	01/16-01/17/02	ERMDP1A0
	16.6	200	203	mg/kg	93	0.77	SW846 6010B	01/16-01/17/02	ERMDP1A1
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Antimony									
	ND	50.0	14.5 N	mg/kg	29		SW846 6010B	01/16-01/17/02	ERMDP1A2
	ND	50.0	14.7 N	mg/kg	29	1.6	SW846 6010B	01/16-01/17/02	ERMDP1A3
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Barium									
	145	200	339	mg/kg	97		SW846 6010B	01/16-01/17/02	ERMDP1A4
	145	200	333	mg/kg	94	1.8	SW846 6010B	01/16-01/17/02	ERMDP1A5
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Cadmium									
	0.24	5.00	5.35	mg/kg	102		SW846 6010B	01/16-01/17/02	ERMDP1A6
	0.24	5.00	5.18	mg/kg	99	3.2	SW846 6010B	01/16-01/17/02	ERMDP1A7
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Chromium									
	23.3	20.0	45.6	mg/kg	112		SW846 6010B	01/16-01/17/02	ERMDP1A8
	23.3	20.0	44.7	mg/kg	107	1.9	SW846 6010B	01/16-01/17/02	ERMDP1A9
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2A150278 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Beryllium									
	0.76	5.00	5.70	mg/kg	99		SW846 6010B	01/16-01/17/02	ERMDP1CA
	0.76	5.00	5.60	mg/kg	97	1.9	SW846 6010B	01/16-01/17/02	ERMDP1CC
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Lead									
	6.1	50.0	53.2	mg/kg	94		SW846 6010B	01/16-01/17/02	ERMDP1CD
	6.1	50.0	52.9	mg/kg	94	0.48	SW846 6010B	01/16-01/17/02	ERMDP1CE
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Selenium									
	ND	200	172	mg/kg	86		SW846 6010B	01/16-01/17/02	ERMDP1CF
	ND	200	171	mg/kg	86	0.65	SW846 6010B	01/16-01/17/02	ERMDP1CG
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Silver									
	ND	5.00	4.62	mg/kg	92		SW846 6010B	01/16-01/17/02	ERMDP1CH
	ND	5.00	4.70	mg/kg	94	1.5	SW846 6010B	01/16-01/17/02	ERMDP1CJ
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Cobalt									
	11.6	50.0	61.1	mg/kg	99		SW846 6010B	01/16-01/17/02	ERMDP1CK
	11.6	50.0	66.4	mg/kg	110	8.3	SW846 6010B	01/16-01/17/02	ERMDP1CL
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Copper									
	25.9	25.0	52.0	mg/kg	105		SW846 6010B	01/16-01/17/02	ERMDP1CM
	25.9	25.0	51.2	mg/kg	101	1.6	SW846 6010B	01/16-01/17/02	ERMDP1CN
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2A150278 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Molybdenum									
	0.47	100	93.7	mg/kg	93		SW846 6010B	01/16-01/17/02	ERMDP1CP
	0.47	100	92.7	mg/kg	92	1.1	SW846 6010B	01/16-01/17/02	ERMDP1CQ
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Nickel									
	14.8	50.0	62.4	mg/kg	95		SW846 6010B	01/16-01/17/02	ERMDP1CR
	14.8	50.0	61.4	mg/kg	93	1.6	SW846 6010B	01/16-01/17/02	ERMDP1CT
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Thallium									
	ND	200	185	mg/kg	92		SW846 6010B	01/16-01/17/02	ERMDP1CU
	ND	200	183	mg/kg	91	1.1	SW846 6010B	01/16-01/17/02	ERMDP1CV
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Vanadium									
	52.1	50.0	107	mg/kg	109		SW846 6010B	01/16-01/17/02	ERMDP1CW
	52.1	50.0	105	mg/kg	106	1.6	SW846 6010B	01/16-01/17/02	ERMDP1CX
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Zinc									
	78.4	50.0	136	mg/kg	115		SW846 6010B	01/16-01/17/02	ERMDP1C0
	78.4	50.0	135	mg/kg	114	0.41	SW846 6010B	01/16-01/17/02	ERMDP1C1
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						

MS Lot-Sample #: E2A140199-001 Prep Batch #...: 2016402

Mercury									
	0.068	0.167	0.252	mg/kg	110		SW846 7471A	01/16-01/17/02	ERMDP1C5
	0.068	0.167	0.238	mg/kg	102	5.4	SW846 7471A	01/16-01/17/02	ERMDP1C6
			Dilution Factor: 1						
			Analysis Time..: 15:10		Instrument ID..: M04			Analyst ID.....: 000023	
			MS Run #.....: 2016185						

NOTE(S):

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

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...:	E2A150278	Work Order #...:	ERN8M1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150272-001		ERN8M1A3-MSD		
Date Sampled...:	01/15/02 11:00	Date Received..:	01/15/02 16:40	MS Run #.....:	2017163
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2017362	Analysis Time..:	12:33		
Dilution Factor:	1	Analyst ID.....:	001464	Instrument ID..:	G13

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
TPH (as Gasoline)	0.12	5.00	4.92	mg/kg	96		SW846 8015B
	0.12	5.00	4.92	mg/kg	96	0.17	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	112	(60 - 130)
	112	(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 #...:	E2A150278	Work Order #...:	ERN9A1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-001		ERN9A1A3-MSD		
Date Sampled...:	01/10/02 12:40	Date Received..:	01/15/02 16:40	MS Run #.....:	2021104
Prep Date.....:	01/19/02	Analysis Date..:	01/19/02		
Prep Batch #...:	2021322	Analysis Time..:	02:49		
Dilution Factor:	1	Analyst ID.....:	999998	Instrument ID..:	MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	ND	50.0	46.6	ug/kg	93		SW846 8260B
	ND	50.0	47.0	ug/kg	94	0.81	SW846 8260B
Benzene	ND	50.0	47.9	ug/kg	96		SW846 8260B
	ND	50.0	46.2	ug/kg	92	3.6	SW846 8260B
Trichloroethene	ND	50.0	50.9	ug/kg	102		SW846 8260B
	ND	50.0	49.2	ug/kg	98	3.3	SW846 8260B
Toluene	ND	50.0	45.7	ug/kg	91		SW846 8260B
	ND	50.0	43.2	ug/kg	86	5.6	SW846 8260B
Chlorobenzene	ND	50.0	44.8	ug/kg	90		SW846 8260B
	ND	50.0	42.1	ug/kg	84	6.4	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	80	(65 - 135)
	82	(65 - 135)
1,2-Dichloroethane-d4	88	(60 - 140)
	89	(60 - 140)
Toluene-d8	86	(70 - 130)
	85	(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 Semivolatiles

Client Lot #...:	E2A150278	Work Order #...:	ERN9W1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-005		ERN9W1A3-MSD		
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2016128
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2016317	Analysis Time..:	19:53		
Dilution Factor:	1	Analyst ID.....:	356074	Instrument ID..:	G02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
TPH (as Diesel)	ND	250	178	mg/kg	71		SW846 8015B
	ND	250	204	mg/kg	81	13	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	76	(60 - 130)
	83	(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

HPLC

Client Lot #...:	E2A150278	Work Order #...:	ERN9W1A4-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-005		ERN9W1A5-MSD		
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2016156
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016374	Analysis Time..:	03:27		
Dilution Factor:	1	Analyst ID.....:	033077	Instrument ID..:	LC7

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acenaphthene	ND	1330	1000	ug/kg	75		SW846 8310
	ND	1330	999	ug/kg	75	0.46	SW846 8310
Acenaphthylene	ND	667	541	ug/kg	81		SW846 8310
	ND	667	498	ug/kg	75	8.4	SW846 8310
Anthracene	ND	26.6	19.4	ug/kg	73		SW846 8310
	ND	26.6	18.3	ug/kg	69	6.0	SW846 8310
Benzo(a)anthracene	ND	66.7	56.9	ug/kg	85		SW846 8310
	ND	66.7	56.9	ug/kg	85	0.02	SW846 8310
Benzo(a)pyrene	**ND**	**66.7**	**52.9**	**ug/kg**	**79**		**SW846 8310**
	ND	**66.7**	**53.8**	**ug/kg**	**81**	**1.8**	**SW846 8310**
Benzo(b)fluoranthene	ND	26.6	21.4	ug/kg	80		SW846 8310
	ND	26.6	21.5	ug/kg	81	0.62	SW846 8310
Benzo(ghi)perylene	ND	106	84.7	ug/kg	80		SW846 8310
	ND	106	86.1	ug/kg	81	1.6	SW846 8310
Benzo(k)fluoranthene	ND	26.6	21.3	ug/kg	80		SW846 8310
	ND	26.6	22.0	ug/kg	83	2.9	SW846 8310
Chrysene	ND	66.7	56.0	ug/kg	84		SW846 8310
	ND	66.7	55.8	ug/kg	84	0.47	SW846 8310
Dibenz(a,h)anthracene	ND	266	190	ug/kg	72		SW846 8310
	ND	266	193	ug/kg	72	1.2	SW846 8310
Fluoranthene	ND	66.7		ug/kg	78		SW846 8310
	ND	66.7	50.1	ug/kg	75	3.4	SW846 8310
Fluorene	**ND**	**133**	**79.7**	**ug/kg**	**60**		**SW846 8310**
	ND	**133**	**71.0**	**ug/kg**	**53**	**12**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**ND**	**66.7**	**53.4**	**ug/kg**	**80**		**SW846 8310**
	ND	**66.7**	**53.9**	**ug/kg**	**81**	**0.92**	**SW846 8310**
Naphthalene	**ND**	**667**	**496**	**ug/kg**	**74**		**SW846 8310**
	ND	**667**	**444**	**ug/kg**	**67**	**11**	**SW846 8310**
Phenanthrene	ND	53.2	37.7	ug/kg	71		SW846 8310
	ND	53.2	34.8	ug/kg	65	8.0	SW846 8310
Pyrene	**ND**	**133**	**109**	**ug/kg**	**82**		**SW846 8310**
	ND	**133**	**105**	**ug/kg**	**79**	**3.3**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	81	(41 - 115)
	73	(41 - 115)

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 #...: E2A150278 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E2A140199-001 Prep Batch #...: 2016399							
Aluminum	NC	(70 - 115)			SW846 6010B	01/16-01/17/02	ERMDP1C8
	NC	(70 - 115)		(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1C9
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Arsenic	94	(75 - 115)			SW846 6010B	01/16-01/17/02	ERMDP1A0
	93	(75 - 115)	0.77	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1A1
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Antimony	29 N	(75 - 115)			SW846 6010B	01/16-01/17/02	ERMDP1A2
	29 N	(75 - 115)	1.6	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1A3
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Barium	97	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1A4
	94	(80 - 120)	1.8	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1A5
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Cadmium	102	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1A6
	99	(80 - 120)	3.2	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1A7
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Chromium	112	(85 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1A8
	107	(85 - 120)	1.9	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1A9
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Beryllium	99	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CA
	97	(80 - 120)	1.9	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CC
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2A150278 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	94	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CD
	94	(80 - 120)	0.48	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CE
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Selenium	86	(70 - 115)			SW846 6010B	01/16-01/17/02	ERMDP1CF
	86	(70 - 115)	0.65	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CG
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Silver	92	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CH
	94	(80 - 120)	1.5	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CJ
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Cobalt	99	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CK
	110	(80 - 120)	8.3	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CL
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Copper	105	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CM
	101	(80 - 120)	1.6	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CN
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Molybdenum	93	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CP
	92	(80 - 120)	1.1	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CQ
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Nickel	95	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CR
	93	(80 - 120)	1.6	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CT
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2A150278 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	92	(75 - 125)			SW846 6010B	01/16-01/17/02	ERMDP1CU
	91	(75 - 125)	1.1	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CV

Dilution Factor: 1
Analysis Time..: 19:01 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 2016183

Vanadium	109	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CW
	106	(80 - 120)	1.6	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CX

Dilution Factor: 1
Analysis Time..: 19:01 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 2016183

Zinc	115	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1C0
	114	(80 - 120)	0.41	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1C1

Dilution Factor: 1
Analysis Time..: 19:01 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 2016183

MS Lot-Sample #: E2A140199-001 Prep Batch #...: 2016402

Mercury	110	(80 - 120)			SW846 7471A	01/16-01/17/02	ERMDP1C5
	102	(80 - 120)	5.4	(0-20)	SW846 7471A	01/16-01/17/02	ERMDP1C6

Dilution Factor: 1
Analysis Time..: 15:10 Instrument ID..: M04 Analyst ID.....: 000023
MS Run #.....: 2016185

NOTE(S):

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

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...:	E2A150278	Work Order #...:	ERN8M1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150272-001		ERN8M1A3-MSD		
Date Sampled...:	01/15/02 11:00	Date Received..:	01/15/02 16:40	MS Run #.....:	2017163
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2017362	Analysis Time..:	12:33		
Dilution Factor:	1	Analyst ID.....:	001464	Instrument ID..:	G13

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	**96**	**(70 - 140)**			**SW846 8015B**
	96	**(70 - 140)**	**0.17**	**(0-40)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	112	(60 - 130)
	112	(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 #...:	E2A150278	Work Order #...:	ERN9A1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-001		ERN9A1A3-MSD		
Date Sampled...:	01/10/02 12:40	Date Received..:	01/15/02 16:40	MS Run #.....:	2021104
Prep Date.....:	01/19/02	Analysis Date..:	01/19/02		
Prep Batch #...:	2021322	Analysis Time..:	02:49		
Dilution Factor:	1	Analyst ID.....:	999998	Instrument ID..:	MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	93	(65 - 150)			SW846 8260B
	94	(65 - 150)	0.81	(0-30)	SW846 8260B
Benzene	96	(70 - 130)			SW846 8260B
	92	(70 - 130)	3.6	(0-30)	SW846 8260B
Trichloroethene	102	(70 - 135)			SW846 8260B
	98	(70 - 135)	3.3	(0-30)	SW846 8260B
Toluene	91	(70 - 130)			SW846 8260B
	86	(70 - 130)	5.6	(0-30)	SW846 8260B
Chlorobenzene	90	(70 - 130)			SW846 8260B
	84	(70 - 130)	6.4	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	80	(65 - 135)
	82	(65 - 135)
1,2-Dichloroethane-d4	88	(60 - 140)
	89	(60 - 140)
Toluene-d8	86	(70 - 130)
	85	(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 Semivolatiles

Client Lot #...:	E2A150278	Work Order #...:	ERN9W1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-005		ERN9W1A3-MSD		
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2016128
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2016317	Analysis Time..:	19:53		
Dilution Factor:	1	Analyst ID.....:	356074	Instrument ID..:	G02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**71**	**(55 - 130)**			**SW846 8015B**
	81	**(55 - 130)**	**13**	**(0-35)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	76	(60 - 130)
	83	(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

HPLC

Client Lot #...:	E2A150278	Work Order #...:	ERN9W1A4-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-005		ERN9W1A5-MSD		
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2016156
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016374	Analysis Time..:	03:27		
Dilution Factor:	1	Analyst ID.....:	033077	Instrument ID..:	LC7

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	75	(50 - 150)			SW846 8310
	75	(50 - 150)	0.46	(0-50)	SW846 8310
Acenaphthylene	81	(50 - 150)			SW846 8310
	75	(50 - 150)	8.4	(0-50)	SW846 8310
Anthracene	73	(50 - 150)			SW846 8310
	69	(50 - 150)	6.0	(0-50)	SW846 8310
Benzo(a)anthracene	85	(50 - 150)			SW846 8310
	85	(50 - 150)	0.02	(0-50)	SW846 8310
Benzo(a)pyrene	**79**	**(49 - 107)**			**SW846 8310**
	81	**(49 - 107)**	**1.8**	**(0-53)**	**SW846 8310**
Benzo(b)fluoranthene	80	(50 - 150)			SW846 8310
	81	(50 - 150)	0.62	(0-50)	SW846 8310
Benzo(ghi)perylene	80	(50 - 150)			SW846 8310
	81	(50 - 150)	1.6	(0-50)	SW846 8310
Benzo(k)fluoranthene	80	(50 - 150)			SW846 8310
	83	(50 - 150)	2.9	(0-50)	SW846 8310
Chrysene	84	(50 - 150)			SW846 8310
	84	(50 - 150)	0.47	(0-50)	SW846 8310
Dibenz(a,h)anthracene	72	(50 - 150)			SW846 8310
	72	(50 - 150)	1.2	(0-50)	SW846 8310
Fluoranthene	78	(50 - 150)			SW846 8310
	75	(50 - 150)	3.4	(0-50)	SW846 8310
Fluorene	**60**	**(43 - 112)**			**SW846 8310**
	53	**(43 - 112)**	**12**	**(0-56)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**80**	**(54 - 114)**			**SW846 8310**
	81	**(54 - 114)**	**0.92**	**(0-51)**	**SW846 8310**
Naphthalene	**74**	**(44 - 110)**			**SW846 8310**
	67	**(44 - 110)**	**11**	**(0-50)**	**SW846 8310**
Phenanthrene	71	(50 - 150)			SW846 8310
	65	(50 - 150)	8.0	(0-50)	SW846 8310
Pyrene	**82**	**(49 - 115)**			**SW846 8310**
	79	**(49 - 115)**	**3.3**	**(0-54)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	81	(41 - 115)
	73	(41 - 115)

NOTE(S):

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

Bold print denotes control parameters

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

January 21, 2002

STL LOT NUMBER: E2A150272
NELAP 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 sample received under chain of custody by STL Los Angeles on January 15, 2002. This sample is 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.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. 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

Page 1 of 000051 total pages in this report.

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

ACCREDITED IN ACCORDANCE WITH nelac

BOE-C6-0181142

Chain of Custody Record

SEVERN TRENT SERVICES **Severn Trent Laboratories, Inc.**

STL-4124 (0700)

Client: HALEY & ALDRICH INC	Project Manager: SCOTT ZACHARY	Date: 1/15/02	Chain of Custody Number: 054114
Address: 9040 FRIARS ROAD SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: E2A150272	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact:	Lab Contact:	
Project Name and Location (State): CG - LOS ANGELES	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: BL-1 ABANDONMENT ROLL-OFF 27285-012			

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 (Attach list if more space is needed): VOCs 8260	TPH 8015	METALS 6010	PAH 8310	Special Instructions/ Conditions of Receipt
BL-1 - 10'	1/15/02	11:00				X									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 NORMAL

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 1/15/02	Time: 14:00	1. Received By: P Bautista	Date: 1-15-02	Time: 1400
2. Relinquished By: P Bautista	Date: 1-15-02	Time: 1640	2. Received By: Terry Swart	Date: 1-15-02	Time: 1640
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: ~~CALL FOR PROJECT # TO CHARGE & TURN AROUND TIME REQUIRED~~ TRAVIS 619-987-1767

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

000002

BOE-C6-0181143

STL LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 1/15/02

Quantims Lot #: E2A150272
Client Name: Harley & Associates
Received by: TS

Quote #: 42295
Project: C6-Torrance
Date/Time Received: 1/15/02 16:40

Delivered by : ☐Client ☐Airborne ☐Fed Ex ☐DHL ☐In-House Courier ☒Rey B. ☐UPS ☐DES ☐Other _____

	Initial / Date
Custody Seal Status: ☐Intact ☐Broken ☒None	AR 1/15/02
Custody Seal #(s): ☒No Seal #	
Sample Container(s): ☒STL-LA ☐Client ☐N/A	
Temperature(s) (Cooler/blank) in °C: 5.4 Correction factor -0.1°C (Corrected Temp.) 5.3	
Thermometer Used : ID: B ☒IR (Infra-red) ☐Digital (Probe)	
Samples: ☒Intact ☐Broken ☐Other	
Anomalies: ☒No ☐Yes (See Clouseau)	
Labeled by RS	
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) :
8310 to WSAC

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

Fraction	1										PH
VOAh 1*											N/A
40 CGJ	2										—

h:HCl na:Sodium Hydoxide znna:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f/l: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 SL:Sleeve
* Number of VOA's w/ Headspace present

LOGGED BY/DATE: 1/15/02 REVIEWED BY/DATE:

PRC Ver. 4 041401 KRF

QA/AC401\Wet\Preset\Sample Control Forms

SEVERN
TRENT
SERVICES

Analytical Report

000004

EXECUTIVE SUMMARY - Detection Highlights

E2A150272

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
BL-1-10 01/15/02 11:00 001				
C6-C8	0.12 J	1.0	mg/kg	SW846 8015B
Mercury	0.033 B	0.10	mg/kg	SW846 7471A
Aluminum	3840	40.0	mg/kg	SW846 6010B
Arsenic	3.7	2.0	mg/kg	SW846 6010B
Barium	37.2	4.0	mg/kg	SW846 6010B
Chromium	14.6 J	2.0	mg/kg	SW846 6010B
Beryllium	0.32	1.0	mg/kg	SW846 6010B
	Qualifiers: B,J,G			
Lead	2.7 J	1.0	mg/kg	SW846 6010B
Cobalt	1.8 B,G	10.0	mg/kg	SW846 6010B
Copper	4.2 B,J,G	5.0	mg/kg	SW846 6010B
Nickel	4.4 B,G	8.0	mg/kg	SW846 6010B
Vanadium	12.0	10.0	mg/kg	SW846 6010B
Zinc	12.5	4.0	mg/kg	SW846 6010B

METHODS SUMMARY

E2A150272

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Extractable Petroleum Hydrocarbons	SW846 8015B	SANA AUTO-SHAKE
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E2A150272

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
ERN8M	001	BL-1-10	01/15/02	11:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: BL-1-10

GC Semivolatiles

Lot-Sample #...:	E2A150272-001	Work Order #...:	ERN8M1AA	Matrix.....:	SOLID
Date Sampled...:	01/15/02 11:00	Date Received..:	01/15/02 16:40	MS Run #.....:	2016128
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016317	Analysis Time..:	13:34		
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	90	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: BL-1-10

GC Volatiles

Lot-Sample #...:	E2A150272-001	Work Order #...:	ERN8M1AC	Matrix.....:	SOLID
Date Sampled...:	01/15/02 11:00	Date Received..:	01/15/02 16:40	MS Run #.....:	2017163
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2017362	Analysis Time..:	12:05		
Dilution Factor:	1				
Analyst ID.....:	001464	Instrument ID..:	G13		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	0.12 J	1.0	mg/kg	0.10

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

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: BL-1-10

GC/MS Volatiles

Lot-Sample #...:	E2A150272-001	Work Order #...:	ERN8M1AD	Matrix.....:	SOLID
Date Sampled...:	01/15/02 11:00	Date Received..:	01/15/02 16:40	MS Run #.....:	2021104
Prep Date.....:	01/18/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2021322	Analysis Time..:	23:48		
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	8.0
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	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
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	2.0
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: BL-1-10

GC/MS Volatiles

Lot-Sample #...: E2A150272-001 Work Order #...: ERN8M1AD 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	1.0
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	78	(65 - 135)
1,2-Dichloroethane-d4	80	(60 - 140)
Toluene-d8	86	(70 - 130)

HALEY & ALDRICH INC

Client Sample ID: BL-1-10

HPLC

Lot-Sample #...: E2A150272-001 Work Order #...: ERN8M1A1 Matrix.....: SOLID
Date Sampled...: 01/15/02 11:00 Date Received..: 01/15/02 16:40 MS Run #.....: 2016156
Prep Date.....: 01/16/02 Analysis Date..: 01/17/02
Prep Batch #...: 2016374 Analysis Time..: 23:54
Dilution Factor: 1
Analyst ID.....: 033077 Instrument ID..: LC7
Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	400	ug/kg	63
Acenaphthylene	ND	200	ug/kg	46
Anthracene	ND	8.0	ug/kg	1.1
Benzo(a)anthracene	ND	16	ug/kg	1.7
Benzo(a)pyrene	ND	10	ug/kg	3.1
Benzo(b)fluoranthene	ND	4.0	ug/kg	2.4
Benzo(ghi)perylene	ND	16	ug/kg	3.1
Benzo(k)fluoranthene	ND	4.0	ug/kg	1.1
Chrysene	ND	20	ug/kg	14
Dibenz(a,h)anthracene	ND	40	ug/kg	9.2
Fluoranthene	ND	20	ug/kg	4.8
Fluorene	ND	40	ug/kg	6.7
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg	3.1
Naphthalene	ND	200	ug/kg	23
Phenanthrene	ND	16	ug/kg	2.6
Pyrene	ND	40	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	76	(41 - 115)

HALEY & ALDRICH INC

BL-1-10

GC/MS Volatiles

Lot-Sample #: E2A150272-001 Work Order #: ERN8M1AD Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Method Blank Report

GC/MS Volatiles

Lot-Sample #: E2A210000-322 B **Work Order #:** ER09N1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown hydrocarbon		8.7	M	21.353	ug/kg
Unknown alkane		7.4	M	21.599	ug/kg

NOTE(S):

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

HALEY & ALDRICH INC

Client Sample ID: BL-1-10

TOTAL Metals

Lot-Sample #...: E2A150272-001 Matrix.....: SOLID
Date Sampled...: 01/15/02 11:00 Date Received..: 01/15/02 16:40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2016399						
Aluminum	3840	40.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AE
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 16.0	
Arsenic	3.7	2.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AF
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.80	
Antimony	ND G	12.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AG
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 1.2	
Barium	37.2	4.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AH
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.20	
Cadmium	ND G	1.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AJ
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.12	
Chromium	14.6 J	2.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AK
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.20	
Beryllium	0.32 B,J,G	1.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AL
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.10	
Lead	2.7 J	1.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AM
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.60	
Selenium	ND G	1.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AN
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.80	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: BL-1-10

TOTAL Metals

Lot-Sample #...: E2A150272-001 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND G	2.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AP
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.20	
Cobalt	1.8 B,G	10.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AQ
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.20	
Copper	4.2 B,J,G	5.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AR
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.80	
Molybdenum	ND G	8.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AT
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.60	
Nickel	4.4 B,G	8.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AU
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.60	
Thallium	ND G	2.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AV
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 1.6	
Vanadium	12.0	10.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AW
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 0.20	
Zinc	12.5	4.0	mg/kg	SW846 6010B	01/16-01/18/02	ERN8M1AX
		Dilution Factor: 2		Analysis Time..: 11:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2016183	MDL.....: 2.0	
Prep Batch #...: 2016402						
Mercury	0.033 B	0.10	mg/kg	SW846 7471A	01/16-01/17/02	ERN8M1A0
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 2016185	MDL.....: 0.020	

NOTE(S):

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

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

SEVERN
TRENT
SERVICES

QA/QC

000017

QC DATA ASSOCIATION SUMMARY

E2A150272

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 8015B		2016317	2016128
	SOLID	SW846 8015B		2017362	2017163
	SOLID	SW846 7471A		2016402	2016185
	SOLID	SW846 8260B		2021322	2021104
	SOLID	SW846 6010B		2016399	2016183
	SOLID	SW846 8310		2016374	2016156

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E2A150272
MB Lot-Sample #: E2A160000-317

Work Order #...: ERQMR1AA

Matrix.....: SOLID

Prep Date.....: 01/16/02

Analysis Time..: 16:35

Analysis Date..: 01/18/02

Prep Batch #...: 2016317

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	94	(60 - 130)

NOTE(S):

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

METHOD BLANK REPORT

HPLC

Client Lot #...: E2A150272
MB Lot-Sample #: G2A160000-374

Work Order #...: ERQ3W1AA

Matrix.....: SOLID

Prep Date.....: 01/16/02

Analysis Time..: 22:43

Analysis Date..: 01/17/02

Prep Batch #...: 2016374

Instrument ID..: LC7

Dilution Factor: 1

Analyst ID.....: 033077

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	75	(41 - 115)

NOTE(S):

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

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E2A150272
MB Lot-Sample #: E2A170000-362

Work Order #...: ERT7G1AA
Prep Date.....: 01/16/02
Prep Batch #...: 2017362
Analyst ID.....: 001464

Matrix.....: SOLID
Analysis Time..: 11:09
Instrument ID..: G13

Analysis Date..: 01/16/02
Dilution Factor: 1

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)	83	(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 #...: E2A150272
MB Lot-Sample #: E2A210000-322

Work Order #...: ER09N1AA

Matrix.....: SOLID

Prep Date.....: 01/18/02

Analysis Time..: 23:18

Analysis Date..: 01/18/02

Prep Batch #...: 2021322

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

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2A150272 Work Order #...: ER09N1AA 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	78	(65 - 135)
1,2-Dichloroethane-d4	80	(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 #...: E2A150272 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E2A160000-399 Prep Batch #...: 2016399						
Aluminum	ND	20.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1CF
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AA
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AC
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	ND	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AD
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	ND	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AE
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	**0.14 B**	**1.0**	**mg/kg**	**SW846 6010B**	**01/16-01/17/02**	**ERQ7T1AF**
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	**0.092 B**	**0.50**	**mg/kg**	**SW846 6010B**	**01/16-01/17/02**	**ERQ7T1AG**
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	**0.42 B**	**0.50**	**mg/kg**	**SW846 6010B**	**01/16-01/17/02**	**ERQ7T1AH**
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AJ
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AK
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AL
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E2A150272 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	0.63 B	2.5	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AM
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	ND	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AN
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AP
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AQ
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AR
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B	01/16-01/17/02	ERQ7T1AT
		Dilution Factor: 1				
		Analysis Time..: 17:25		Analyst ID.....: 021088	Instrument ID..: M01	

MB Lot-Sample #: E2A160000-402 Prep Batch #...: 2016402

Mercury	ND	0.10	mg/kg	SW846 7471A	01/16-01/17/02	ERQ8K1AA
		Dilution Factor: 1				
		Analysis Time..: 14:39		Analyst ID.....: 000023	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 #...: E2A150272 Work Order #...: ERQMR1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A160000-317
Prep Date.....: 01/16/02 Analysis Date..: 01/16/02
Prep Batch #...: 2016317 Analysis Time..: 17:56
Dilution Factor: 1 Instrument ID..: G02
Analyst ID.....: 356074

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Diesel)	250	207	mg/kg	83	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	85	(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

HPLC

Client Lot #...: E2A150272 Work Order #...: ERQ3W1AC Matrix.....: SOLID
LCS Lot-Sample#: G2A160000-374
Prep Date.....: 01/16/02 Analysis Date..: 01/17/02
Prep Batch #...: 2016374 Analysis Time..: 23:18
Dilution Factor: 1 Instrument ID..: LC7
Analyst ID.....: 033077

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Acenaphthene	1330	1030	ug/kg	77	SW846 8310
Acenaphthylene	667	462	ug/kg	69	SW846 8310
Anthracene	26.6	15.6	ug/kg	59	SW846 8310
Benzo(a)anthracene	66.7	50.3	ug/kg	75	SW846 8310
Benzo(a)pyrene	**66.7**	**46.2**	**ug/kg**	**69**	**SW846 8310**
Benzo(b)fluoranthene	26.6	18.9	ug/kg	71	SW846 8310
Benzo(ghi)perylene	106	76.0	ug/kg	71	SW846 8310
Benzo(k)fluoranthene	26.6	19.0	ug/kg	71	SW846 8310
Chrysene	66.7	50.0	ug/kg	75	SW846 8310
Dibenz(a,h)anthracene	266	170	ug/kg	64	SW846 8310
Fluoranthene	66.7	44.2	ug/kg	66	SW846 8310
Fluorene	**133**	**60.4**	**ug/kg**	**45**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**66.7**	**47.9**	**ug/kg**	**72**	**SW846 8310**
Naphthalene	**667**	**425**	**ug/kg**	**64**	**SW846 8310**
Phenanthrene	53.2	29.1	ug/kg	55	SW846 8310
Pyrene	**133**	**90.1**	**ug/kg**	**68**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	75	(41 - 115)

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 #...: E2A150272 Work Order #...: ERT7G1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A170000-362
Prep Date.....: 01/16/02 Analysis Date..: 01/16/02
Prep Batch #...: 2017362 Analysis Time..: 11:37
Dilution Factor: 1 Instrument ID..: G13
Analyst ID.....: 001464

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Gasoline)	5.00	4.94	mg/kg	99	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	112	(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 #...: E2A150272 Work Order #...: ER09N1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A210000-322
Prep Date.....: 01/18/02 Analysis Date..: 01/18/02
Prep Batch #...: 2021322 Analysis Time..: 22:48
Dilution Factor: 1 Instrument ID..: MSD
Analyst ID.....: 999998

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	50.0	52.0	ug/kg	104	SW846 8260B
Benzene	50.0	54.4	ug/kg	109	SW846 8260B
Trichloroethene	50.0	52.9	ug/kg	106	SW846 8260B
Toluene	50.0	50.1	ug/kg	100	SW846 8260B
Chlorobenzene	50.0	51.1	ug/kg	102	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	81	(65 - 135)
1,2-Dichloroethane-d4	88	(60 - 140)
Toluene-d8	85	(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 #...: E2A150272 Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E2A160000-399 Prep Batch #...: 2016399							
Arsenic	200	188	mg/kg	94	SW846 6010B	01/16-01/17/02	ERQ7T1AU
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Aluminum	200	182	mg/kg	91	SW846 6010B	01/16-01/17/02	ERQ7T1CG
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	50.0	45.2	mg/kg	90	SW846 6010B	01/16-01/17/02	ERQ7T1AV
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	200	189	mg/kg	94	SW846 6010B	01/16-01/17/02	ERQ7T1AW
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	5.00	4.87	mg/kg	97	SW846 6010B	01/16-01/17/02	ERQ7T1AX
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	20.0	20.2	mg/kg	101	SW846 6010B	01/16-01/17/02	ERQ7T1A0
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	5.00	5.14	mg/kg	103	SW846 6010B	01/16-01/17/02	ERQ7T1A1
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	50.0	47.4	mg/kg	95	SW846 6010B	01/16-01/17/02	ERQ7T1A2
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	200	174	mg/kg	87	SW846 6010B	01/16-01/17/02	ERQ7T1A3
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Silver	5.00	4.74	mg/kg	95	SW846 6010B	01/16-01/17/02	ERQ7T1A4
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2A150272 Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	50.0	48.3	mg/kg	97	SW846 6010B	01/16-01/17/02	ERQ7T1A5
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Copper	25.0	23.3	mg/kg	93	SW846 6010B	01/16-01/17/02	ERQ7T1A6
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	100	97.8	mg/kg	98	SW846 6010B	01/16-01/17/02	ERQ7T1A7
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	50.0	48.0	mg/kg	96	SW846 6010B	01/16-01/17/02	ERQ7T1A8
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	200	187	mg/kg	93	SW846 6010B	01/16-01/17/02	ERQ7T1A9
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	50.0	49.4	mg/kg	99	SW846 6010B	01/16-01/17/02	ERQ7T1CA
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	50.0	49.7	mg/kg	99	SW846 6010B	01/16-01/17/02	ERQ7T1CC
			Dilution Factor: 1				
			Analysis Time..: 17:33		Analyst ID.....: 021088	Instrument ID..: M01	

LCS Lot-Sample#: E2A160000-402 **Prep Batch #...:** 2016402

Mercury	0.833	0.808	mg/kg	97	SW846 7471A	01/16-01/17/02	ERQ8K1AC
			Dilution Factor: 1				
			Analysis Time..: 14:41		Analyst ID.....: 000023	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 #...: E2A150272 Work Order #...: ERQMR1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A160000-317
Prep Date.....: 01/16/02 Analysis Date..: 01/16/02
Prep Batch #...: 2016317 Analysis Time..: 17:56
Dilution Factor: 1 Instrument ID..: G02
Analyst ID.....: 356074

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	83	(55 - 130)	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	85	(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

HPLC

Client Lot #...: E2A150272 Work Order #...: ERQ3W1AC Matrix.....: SOLID
LCS Lot-Sample#: G2A160000-374
Prep Date.....: 01/16/02 Analysis Date..: 01/17/02
Prep Batch #...: 2016374 Analysis Time..: 23:18
Dilution Factor: 1 Instrument ID..: LC7
Analyst ID.....: 033077

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	77	(50 - 150)	SW846 8310
Acenaphthylene	69	(50 - 150)	SW846 8310
Anthracene	59	(50 - 150)	SW846 8310
Benzo(a)anthracene	75	(50 - 150)	SW846 8310
Benzo(a)pyrene	**69**	**(49 - 107)**	**SW846 8310**
Benzo(b)fluoranthene	71	(50 - 150)	SW846 8310
Benzo(ghi)perylene	71	(50 - 150)	SW846 8310
Benzo(k)fluoranthene	71	(50 - 150)	SW846 8310
Chrysene	75	(50 - 150)	SW846 8310
Dibenz(a,h)anthracene	64	(50 - 150)	SW846 8310
Fluoranthene	66	(50 - 150)	SW846 8310
Fluorene	**45**	**(43 - 112)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**72**	**(54 - 114)**	**SW846 8310**
Naphthalene	**64**	**(44 - 110)**	**SW846 8310**
Phenanthrene	55	(50 - 150)	SW846 8310
Pyrene	**68**	**(49 - 115)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	75	(41 - 115)

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 #...: E2A150272 Work Order #...: ERT7G1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A170000-362
Prep Date.....: 01/16/02 Analysis Date..: 01/16/02
Prep Batch #...: 2017362 Analysis Time..: 11:37
Dilution Factor: 1 Instrument ID..: G13
Analyst ID.....: 001464

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Gasoline)	99	(70 - 140)	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	112	(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 #...: E2A150272 Work Order #...: ER09N1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A210000-322
Prep Date.....: 01/18/02 Analysis Date..: 01/18/02
Prep Batch #...: 2021322 Analysis Time..: 22:48
Dilution Factor: 1 Instrument ID..: MSD
Analyst ID.....: 999998

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	104	(65 - 150)	SW846 8260B
Benzene	109	(70 - 130)	SW846 8260B
Trichloroethene	106	(70 - 135)	SW846 8260B
Toluene	100	(70 - 130)	SW846 8260B
Chlorobenzene	102	(70 - 130)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	81	(65 - 135)
1,2-Dichloroethane-d4	88	(60 - 140)
Toluene-d8	85	(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 #...: E2A150272 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E2A160000-399 Prep Batch #...: 2016399					
Arsenic	94	(75 - 115)	SW846 6010B	01/16-01/17/02	ERQ7T1AU
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Aluminum	91	(70 - 115)	SW846 6010B	01/16-01/17/02	ERQ7T1CG
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	90	(75 - 115)	SW846 6010B	01/16-01/17/02	ERQ7T1AV
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Barium	94	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1AW
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	97	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1AX
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	101	(85 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A0
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	103	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A1
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Lead	95	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A2
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	87	(70 - 115)	SW846 6010B	01/16-01/17/02	ERQ7T1A3
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	
Silver	95	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A4
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088	Instrument ID..: M01	

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2A150272 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	97	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A5
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088		Instrument ID..: M01
Copper	93	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A6
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088		Instrument ID..: M01
Molybdenum	98	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A7
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088		Instrument ID..: M01
Nickel	96	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1A8
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088		Instrument ID..: M01
Thallium	93	(75 - 125)	SW846 6010B	01/16-01/17/02	ERQ7T1A9
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088		Instrument ID..: M01
Vanadium	99	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1CA
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088		Instrument ID..: M01
Zinc	99	(80 - 120)	SW846 6010B	01/16-01/17/02	ERQ7T1CC
		Dilution Factor: 1			
		Analysis Time..: 17:33	Analyst ID.....: 021088		Instrument ID..: M01

LCS Lot-Sample#: E2A160000-402 Prep Batch #...: 2016402

Mercury	97	(85 - 115)	SW846 7471A	01/16-01/17/02	ERQ8K1AC
		Dilution Factor: 1			
		Analysis Time..: 14:41	Analyst ID.....: 000023		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 #...: E2A150272 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E2A140199-001 Prep Batch #...: 2016399									
Aluminum									
	21800	200	26200 N	mg/kg			SW846 6010B	01/16-01/17/02	ERMDP1C8
	21800	200	25600 N	mg/kg			SW846 6010B	01/16-01/17/02	ERMDP1C9
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Arsenic									
	16.6	200	205	mg/kg	94		SW846 6010B	01/16-01/17/02	ERMDP1A0
	16.6	200	203	mg/kg	93	0.77	SW846 6010B	01/16-01/17/02	ERMDP1A1
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Antimony									
	ND	50.0	14.5 N	mg/kg	29		SW846 6010B	01/16-01/17/02	ERMDP1A2
	ND	50.0	14.7 N	mg/kg	29	1.6	SW846 6010B	01/16-01/17/02	ERMDP1A3
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Barium									
	145	200	339	mg/kg	97		SW846 6010B	01/16-01/17/02	ERMDP1A4
	145	200	333	mg/kg	94	1.8	SW846 6010B	01/16-01/17/02	ERMDP1A5
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Cadmium									
	0.24	5.00	5.35	mg/kg	102		SW846 6010B	01/16-01/17/02	ERMDP1A6
	0.24	5.00	5.18	mg/kg	99	3.2	SW846 6010B	01/16-01/17/02	ERMDP1A7
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Chromium									
	23.3	20.0	45.6	mg/kg	112		SW846 6010B	01/16-01/17/02	ERMDP1A8
	23.3	20.0	44.7	mg/kg	107	1.9	SW846 6010B	01/16-01/17/02	ERMDP1A9
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2A150272 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Beryllium									
	0.76	5.00	5.70	mg/kg	99		SW846 6010B	01/16-01/17/02	ERMDP1CA
	0.76	5.00	5.60	mg/kg	97	1.9	SW846 6010B	01/16-01/17/02	ERMDP1CC
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Lead									
	6.1	50.0	53.2	mg/kg	94		SW846 6010B	01/16-01/17/02	ERMDP1CD
	6.1	50.0	52.9	mg/kg	94	0.48	SW846 6010B	01/16-01/17/02	ERMDP1CE
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Selenium									
	ND	200	172	mg/kg	86		SW846 6010B	01/16-01/17/02	ERMDP1CF
	ND	200	171	mg/kg	86	0.65	SW846 6010B	01/16-01/17/02	ERMDP1CG
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Silver									
	ND	5.00	4.62	mg/kg	92		SW846 6010B	01/16-01/17/02	ERMDP1CH
	ND	5.00	4.70	mg/kg	94	1.5	SW846 6010B	01/16-01/17/02	ERMDP1CJ
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Cobalt									
	11.6	50.0	61.1	mg/kg	99		SW846 6010B	01/16-01/17/02	ERMDP1CK
	11.6	50.0	66.4	mg/kg	110	8.3	SW846 6010B	01/16-01/17/02	ERMDP1CL
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Copper									
	25.9	25.0	52.0	mg/kg	105		SW846 6010B	01/16-01/17/02	ERMDP1CM
	25.9	25.0	51.2	mg/kg	101	1.6	SW846 6010B	01/16-01/17/02	ERMDP1CN
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2A150272 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Molybdenum									
	0.47	100	93.7	mg/kg	93		SW846 6010B	01/16-01/17/02	ERMDP1CP
	0.47	100	92.7	mg/kg	92	1.1	SW846 6010B	01/16-01/17/02	ERMDP1CQ
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Nickel									
	14.8	50.0	62.4	mg/kg	95		SW846 6010B	01/16-01/17/02	ERMDP1CR
	14.8	50.0	61.4	mg/kg	93	1.6	SW846 6010B	01/16-01/17/02	ERMDP1CT
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Thallium									
	ND	200	185	mg/kg	92		SW846 6010B	01/16-01/17/02	ERMDP1CU
	ND	200	183	mg/kg	91	1.1	SW846 6010B	01/16-01/17/02	ERMDP1CV
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Vanadium									
	52.1	50.0	107	mg/kg	109		SW846 6010B	01/16-01/17/02	ERMDP1CW
	52.1	50.0	105	mg/kg	106	1.6	SW846 6010B	01/16-01/17/02	ERMDP1CX
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						
Zinc									
	78.4	50.0	136	mg/kg	115		SW846 6010B	01/16-01/17/02	ERMDP1C0
	78.4	50.0	135	mg/kg	114	0.41	SW846 6010B	01/16-01/17/02	ERMDP1C1
			Dilution Factor: 1						
			Analysis Time..: 19:01		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2016183						

MS Lot-Sample #: E2A140199-001 Prep Batch #...: 2016402

Mercury									
	0.068	0.167	0.252	mg/kg	110		SW846 7471A	01/16-01/17/02	ERMDP1C5
	0.068	0.167	0.238	mg/kg	102	5.4	SW846 7471A	01/16-01/17/02	ERMDP1C6
			Dilution Factor: 1						
			Analysis Time..: 15:10		Instrument ID..: M04			Analyst ID.....: 000023	
			MS Run #.....: 2016185						

NOTE(S):

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

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...:	E2A150272	Work Order #...:	ERN8M1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150272-001		ERN8M1A3-MSD		
Date Sampled...:	01/15/02 11:00	Date Received..:	01/15/02 16:40	MS Run #.....:	2017163
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2017362	Analysis Time..:	12:33		
Dilution Factor:	1	Analyst ID.....:	001464	Instrument ID..:	G13

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
TPH (as Gasoline)	0.12	5.00	4.92	mg/kg	96		SW846 8015B
	0.12	5.00	4.92	mg/kg	96	0.17	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	112	(60 - 130)
	112	(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 #...:	E2A150272	Work Order #...:	ERN9A1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-001		ERN9A1A3-MSD		
Date Sampled...:	01/10/02 12:40	Date Received..:	01/15/02 16:40	MS Run #.....:	2021104
Prep Date.....:	01/19/02	Analysis Date..:	01/19/02		
Prep Batch #...:	2021322	Analysis Time..:	02:49		
Dilution Factor:	1	Analyst ID.....:	999998	Instrument ID..:	MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	ND	50.0	46.6	ug/kg	93		SW846 8260B
	ND	50.0	47.0	ug/kg	94	0.81	SW846 8260B
Benzene	ND	50.0	47.9	ug/kg	96		SW846 8260B
	ND	50.0	46.2	ug/kg	92	3.6	SW846 8260B
Trichloroethene	ND	50.0	50.9	ug/kg	102		SW846 8260B
	ND	50.0	49.2	ug/kg	98	3.3	SW846 8260B
Toluene	ND	50.0	45.7	ug/kg	91		SW846 8260B
	ND	50.0	43.2	ug/kg	86	5.6	SW846 8260B
Chlorobenzene	ND	50.0	44.8	ug/kg	90		SW846 8260B
	ND	50.0	42.1	ug/kg	84	6.4	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	80	(65 - 135)
	82	(65 - 135)
1,2-Dichloroethane-d4	88	(60 - 140)
	89	(60 - 140)
Toluene-d8	86	(70 - 130)
	85	(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 Semivolatiles

Client Lot #...:	E2A150272	Work Order #...:	ERN9W1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-005		ERN9W1A3-MSD		
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2016128
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2016317	Analysis Time..:	19:53		
Dilution Factor:	1	Analyst ID.....:	356074	Instrument ID..:	G02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
TPH (as Diesel)	ND	250	178	mg/kg	71		SW846 8015B
	ND	250	204	mg/kg	81	13	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	76	(60 - 130)
	83	(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

HPLC

Client Lot #...:	E2A150272	Work Order #...:	ERN9W1A4-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-005		ERN9W1A5-MSD		
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2016156
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016374	Analysis Time..:	03:27		
Dilution Factor:	1	Analyst ID.....:	033077	Instrument ID..:	LC7

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acenaphthene	ND	1330	1000	ug/kg	75		SW846 8310
	ND	1330	999	ug/kg	75	0.46	SW846 8310
Acenaphthylene	ND	667	541	ug/kg	81		SW846 8310
	ND	667	498	ug/kg	75	8.4	SW846 8310
Anthracene	ND	26.6	19.4	ug/kg	73		SW846 8310
	ND	26.6	18.3	ug/kg	69	6.0	SW846 8310
Benzo(a)anthracene	ND	66.7	56.9	ug/kg	85		SW846 8310
	ND	66.7	56.9	ug/kg	85	0.02	SW846 8310
Benzo(a)pyrene	**ND**	**66.7**	**52.9**	**ug/kg**	**79**		**SW846 8310**
	ND	**66.7**	**53.8**	**ug/kg**	**81**	**1.8**	**SW846 8310**
Benzo(b)fluoranthene	ND	26.6	21.4	ug/kg	80		SW846 8310
	ND	26.6	21.5	ug/kg	81	0.62	SW846 8310
Benzo(ghi)perylene	ND	106	84.7	ug/kg	80		SW846 8310
	ND	106	86.1	ug/kg	81	1.6	SW846 8310
Benzo(k)fluoranthene	ND	26.6	21.3	ug/kg	80		SW846 8310
	ND	26.6	22.0	ug/kg	83	2.9	SW846 8310
Chrysene	ND	66.7	56.0	ug/kg	84		SW846 8310
	ND	66.7	55.8	ug/kg	84	0.47	SW846 8310
Dibenz(a,h)anthracene	ND	266	190	ug/kg	72		SW846 8310
	ND	266	193	ug/kg	72	1.2	SW846 8310
Fluoranthene	ND	66.7		ug/kg	78		SW846 8310
	ND	66.7	50.1	ug/kg	75	3.4	SW846 8310
Fluorene	**ND**	**133**	**79.7**	**ug/kg**	**60**		**SW846 8310**
	ND	**133**	**71.0**	**ug/kg**	**53**	**12**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**ND**	**66.7**	**53.4**	**ug/kg**	**80**		**SW846 8310**
	ND	**66.7**	**53.9**	**ug/kg**	**81**	**0.92**	**SW846 8310**
Naphthalene	**ND**	**667**	**496**	**ug/kg**	**74**		**SW846 8310**
	ND	**667**	**444**	**ug/kg**	**67**	**11**	**SW846 8310**
Phenanthrene	ND	53.2	37.7	ug/kg	71		SW846 8310
	ND	53.2	34.8	ug/kg	65	8.0	SW846 8310
Pyrene	**ND**	**133**	**109**	**ug/kg**	**82**		**SW846 8310**
	ND	**133**	**105**	**ug/kg**	**79**	**3.3**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	81	(41 - 115)
	73	(41 - 115)

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 #...: E2A150272 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E2A140199-001 Prep Batch #...: 2016399							
Aluminum	NC	(70 - 115)			SW846 6010B	01/16-01/17/02	ERMDP1C8
	NC	(70 - 115)		(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1C9
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Arsenic	94	(75 - 115)			SW846 6010B	01/16-01/17/02	ERMDP1A0
	93	(75 - 115)	0.77	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1A1
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Antimony	29 N	(75 - 115)			SW846 6010B	01/16-01/17/02	ERMDP1A2
	29 N	(75 - 115)	1.6	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1A3
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Barium	97	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1A4
	94	(80 - 120)	1.8	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1A5
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Cadmium	102	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1A6
	99	(80 - 120)	3.2	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1A7
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Chromium	112	(85 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1A8
	107	(85 - 120)	1.9	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1A9
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Beryllium	99	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CA
	97	(80 - 120)	1.9	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CC
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2A150272 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	94	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CD
	94	(80 - 120)	0.48	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CE
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Selenium	86	(70 - 115)			SW846 6010B	01/16-01/17/02	ERMDP1CF
	86	(70 - 115)	0.65	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CG
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Silver	92	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CH
	94	(80 - 120)	1.5	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CJ
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Cobalt	99	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CK
	110	(80 - 120)	8.3	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CL
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Copper	105	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CM
	101	(80 - 120)	1.6	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CN
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Molybdenum	93	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CP
	92	(80 - 120)	1.1	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CQ
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					
Nickel	95	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CR
	93	(80 - 120)	1.6	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CT
		Dilution Factor: 1					
		Analysis Time..: 19:01			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2016183					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2A150272 Matrix.....: SOLID
Date Sampled...: 01/14/02 12:30 Date Received..: 01/14/02 17:46

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	92	(75 - 125)			SW846 6010B	01/16-01/17/02	ERMDP1CU
	91	(75 - 125)	1.1	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CV

Dilution Factor: 1
Analysis Time..: 19:01 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 2016183

Vanadium	109	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1CW
	106	(80 - 120)	1.6	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1CX

Dilution Factor: 1
Analysis Time..: 19:01 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 2016183

Zinc	115	(80 - 120)			SW846 6010B	01/16-01/17/02	ERMDP1C0
	114	(80 - 120)	0.41	(0-25)	SW846 6010B	01/16-01/17/02	ERMDP1C1

Dilution Factor: 1
Analysis Time..: 19:01 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 2016183

MS Lot-Sample #: E2A140199-001 Prep Batch #...: 2016402

Mercury	110	(80 - 120)			SW846 7471A	01/16-01/17/02	ERMDP1C5
	102	(80 - 120)	5.4	(0-20)	SW846 7471A	01/16-01/17/02	ERMDP1C6

Dilution Factor: 1
Analysis Time..: 15:10 Instrument ID..: M04 Analyst ID.....: 000023
MS Run #.....: 2016185

NOTE(S):

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

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...:	E2A150272	Work Order #...:	ERN8M1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150272-001		ERN8M1A3-MSD		
Date Sampled...:	01/15/02 11:00	Date Received..:	01/15/02 16:40	MS Run #.....:	2017163
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2017362	Analysis Time..:	12:33		
Dilution Factor:	1	Analyst ID.....:	001464	Instrument ID..:	G13

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	96	(70 - 140)			SW846 8015B
	96	(70 - 140)	0.17	(0-40)	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	112	(60 - 130)
	112	(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 #...:	E2A150272	Work Order #...:	ERN9A1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-001		ERN9A1A3-MSD		
Date Sampled...:	01/10/02 12:40	Date Received..:	01/15/02 16:40	MS Run #.....:	2021104
Prep Date.....:	01/19/02	Analysis Date..:	01/19/02		
Prep Batch #...:	2021322	Analysis Time..:	02:49		
Dilution Factor:	1	Analyst ID.....:	999998	Instrument ID..:	MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	93	(65 - 150)			SW846 8260B
	94	(65 - 150)	0.81	(0-30)	SW846 8260B
Benzene	96	(70 - 130)			SW846 8260B
	92	(70 - 130)	3.6	(0-30)	SW846 8260B
Trichloroethene	102	(70 - 135)			SW846 8260B
	98	(70 - 135)	3.3	(0-30)	SW846 8260B
Toluene	91	(70 - 130)			SW846 8260B
	86	(70 - 130)	5.6	(0-30)	SW846 8260B
Chlorobenzene	90	(70 - 130)			SW846 8260B
	84	(70 - 130)	6.4	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	80	(65 - 135)
	82	(65 - 135)
1,2-Dichloroethane-d4	88	(60 - 140)
	89	(60 - 140)
Toluene-d8	86	(70 - 130)
	85	(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 Semivolatiles

Client Lot #...:	E2A150272	Work Order #...:	ERN9W1A2-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-005		ERN9W1A3-MSD		
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2016128
Prep Date.....:	01/16/02	Analysis Date..:	01/16/02		
Prep Batch #...:	2016317	Analysis Time..:	19:53		
Dilution Factor:	1	Analyst ID.....:	356074	Instrument ID..:	G02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	71	(55 - 130)			SW846 8015B
	81	(55 - 130)	13	(0-35)	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	76	(60 - 130)
	83	(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

HPLC

Client Lot #...:	E2A150272	Work Order #...:	ERN9W1A4-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A150278-005		ERN9W1A5-MSD		
Date Sampled...:	01/14/02 16:10	Date Received..:	01/15/02 16:40	MS Run #.....:	2016156
Prep Date.....:	01/16/02	Analysis Date..:	01/18/02		
Prep Batch #...:	2016374	Analysis Time..:	03:27		
Dilution Factor:	1	Analyst ID.....:	033077	Instrument ID..:	LC7

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	75	(50 - 150)			SW846 8310
	75	(50 - 150)	0.46	(0-50)	SW846 8310
Acenaphthylene	81	(50 - 150)			SW846 8310
	75	(50 - 150)	8.4	(0-50)	SW846 8310
Anthracene	73	(50 - 150)			SW846 8310
	69	(50 - 150)	6.0	(0-50)	SW846 8310
Benzo(a)anthracene	85	(50 - 150)			SW846 8310
	85	(50 - 150)	0.02	(0-50)	SW846 8310
Benzo(a)pyrene	**79**	**(49 - 107)**			**SW846 8310**
	81	**(49 - 107)**	**1.8**	**(0-53)**	**SW846 8310**
Benzo(b)fluoranthene	80	(50 - 150)			SW846 8310
	81	(50 - 150)	0.62	(0-50)	SW846 8310
Benzo(ghi)perylene	80	(50 - 150)			SW846 8310
	81	(50 - 150)	1.6	(0-50)	SW846 8310
Benzo(k)fluoranthene	80	(50 - 150)			SW846 8310
	83	(50 - 150)	2.9	(0-50)	SW846 8310
Chrysene	84	(50 - 150)			SW846 8310
	84	(50 - 150)	0.47	(0-50)	SW846 8310
Dibenz(a,h)anthracene	72	(50 - 150)			SW846 8310
	72	(50 - 150)	1.2	(0-50)	SW846 8310
Fluoranthene	78	(50 - 150)			SW846 8310
	75	(50 - 150)	3.4	(0-50)	SW846 8310
Fluorene	**60**	**(43 - 112)**			**SW846 8310**
	53	**(43 - 112)**	**12**	**(0-56)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**80**	**(54 - 114)**			**SW846 8310**
	81	**(54 - 114)**	**0.92**	**(0-51)**	**SW846 8310**
Naphthalene	**74**	**(44 - 110)**			**SW846 8310**
	67	**(44 - 110)**	**11**	**(0-50)**	**SW846 8310**
Phenanthrene	71	(50 - 150)			SW846 8310
	65	(50 - 150)	8.0	(0-50)	SW846 8310
Pyrene	**82**	**(49 - 115)**			**SW846 8310**
	79	**(49 - 115)**	**3.3**	**(0-54)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1-Methylnaphthalene	81	(41 - 115)
	73	(41 - 115)

NOTE(S):

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

Bold print denotes control parameters

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

February 14, 2002

STL LOT NUMBER: E2A240297
NELAP 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 seven samples received under chain of custody by STL Los Angeles on January 24, 2002. 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 NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. 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

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

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 1/24/02	Chain of Custody Number: 050191
Address: 9040 FRIARS RD	Telephone Number (Area Code)/Fax Number	Lab Number: E2A240297	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact	Lab Contact	
Project Name and Location (State): CG - LOS ANGELES	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 27960 - 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): 8260	8015	6010	8310				Hold (Reduce RULT)				Special Instructions/ Conditions of Receipt
RO #7 1-VEW-6-45'	1/16/02	11:45				X		X							↓	↓	↓	↓								
RO #9 1-VEW-7-69'	1/21/02	13:00				↓		↓																		
RO #10 1-VEW-21-35'	1/23/02	840				↓		↓																		
RO#7 1-VEW-14-70'	1/16/02	1600				X		X														X				
RO#7 1-VEW-13-67	1/17/02	9:30				↓		↓														X				
RO #9 1-VEW-9-63'	1/18/02	14:00																				X				
RO #9 1-VEW-10-60'	1/17/02	17:00				↓		↓														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 NORMAL

QC Requirements (Specify)

1. Relinquished By: JU	Date: 1/24/02	Time: 19:30	1. Received By: [signature]	Date: 1/24/02	Time: 1930
2. Relinquished By	Date	Time	2. Received By	Date	Time
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

STL LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 01-24-02

Quantims Lot #: E2A240297 Quote #: 42295
Client Name: HALEY & ALDRICH Project: BOEING C-6
Received by: R SUZUKI Date/Time Received: 01-24-02 1930
Delivered by : ☐Client ☐Airborne ☐Fed Ex ☐DHL ☐In-House Courier ☒Rey B.
☐UPS ☐DES ☐Other _____

Initial / Date

Custody Seal Status: ☐Intact ☐Broken ☒None ..... RS 01/24/02
Custody Seal #(s): _____ ☒No Seal # .....
Sample Container(s): ☐STL-LA ☐Client ☐N/A .....
Temperature(s) (Cooler/blank) in °C: 5.5 Correction factor -0.1°C (Corrected Temp.) 5.4 ...
Thermometer Used : ID: B ☒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) :

8310's to Del Mar

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

Fraction	1→3	4-7									PH
VOAh /*											N/A
CGJ	1	1									

h:HCl na:Sodium Hydoxide znna:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f/l: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 SL:Sleeve
* Number of VOA's w/ Headspace present

LOGGED BY/DATE: 01/24/02 REVIEWED BY/DATE: [signature] 1-28-01

PRC Ver. 6 061401 KRF QANACA01\N:\Precis\Sample Control Forms

RSO 000002

SEVERN
TRENT
SERVICES

Analytical Report

000003

EXECUTIVE SUMMARY - Detection Highlights

E2A240297

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
R0#7 1_VEW_6_45 01/16/02 11:45 001				
Fluorene	5.4	5	ug/kg	SW846 8310
Mercury	0.037 B	0.10	mg/kg	SW846 7471A
Aluminum	24100	20.0	mg/kg	SW846 6010B
Arsenic	7.5	1.0	mg/kg	SW846 6010B
Barium	184	2.0	mg/kg	SW846 6010B
Cadmium	1.3	0.50	mg/kg	SW846 6010B
Chromium	33.6	1.0	mg/kg	SW846 6010B
Beryllium	0.76	0.50	mg/kg	SW846 6010B
Lead	6.7	0.50	mg/kg	SW846 6010B
Cobalt	11.7	5.0	mg/kg	SW846 6010B
Copper	31.1	2.5	mg/kg	SW846 6010B
Molybdenum	1.5 B	4.0	mg/kg	SW846 6010B
Nickel	22.1	4.0	mg/kg	SW846 6010B
Thallium	2.0	1.0	mg/kg	SW846 6010B
Vanadium	64.8	5.0	mg/kg	SW846 6010B
Zinc	85.2	2.0	mg/kg	SW846 6010B
R0#9 1_VEW_7_69 01/21/02 13:00 002				
Mercury	0.17	0.10	mg/kg	SW846 7471A
Aluminum	16100	20.0	mg/kg	SW846 6010B
Arsenic	15.3	1.0	mg/kg	SW846 6010B
Barium	100	2.0	mg/kg	SW846 6010B
Chromium	30.9	1.0	mg/kg	SW846 6010B
Beryllium	0.56	0.50	mg/kg	SW846 6010B
Lead	5.2	0.50	mg/kg	SW846 6010B
Selenium	0.58	0.50	mg/kg	SW846 6010B
Cobalt	9.9	5.0	mg/kg	SW846 6010B
Copper	21.1	2.5	mg/kg	SW846 6010B
Molybdenum	1.3 B	4.0	mg/kg	SW846 6010B
Nickel	17.6	4.0	mg/kg	SW846 6010B
Thallium	1.3	1.0	mg/kg	SW846 6010B
Vanadium	46.7	5.0	mg/kg	SW846 6010B
Zinc	56.7	2.0	mg/kg	SW846 6010B
Acetone	1400	1200	ug/kg	SW846 8260B
2-Butanone	4900	1200	ug/kg	SW846 8260B
4-Methyl-2-pentanone	520 J	1200	ug/kg	SW846 8260B
R0#10_1_VEW_21_35 01/23/02 08:40 003				
C6-C8	79	20	mg/kg	SW846 8015B
Fluorene	7.6	5	ug/kg	SW846 8310
Mercury	0.071 B	0.10	mg/kg	SW846 7471A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E2A240297

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
R0#10_1_VEW_21_35 01/23/02 08:40 003				
Aluminum	34500	20.0	mg/kg	SW846 6010B
Arsenic	4.5	1.0	mg/kg	SW846 6010B
Barium	182	2.0	mg/kg	SW846 6010B
Chromium	39.1	1.0	mg/kg	SW846 6010B
Beryllium	1.1	0.50	mg/kg	SW846 6010B
Lead	8.7	0.50	mg/kg	SW846 6010B
Selenium	0.90	0.50	mg/kg	SW846 6010B
Cobalt	14.9	5.0	mg/kg	SW846 6010B
Copper	39.2	2.5	mg/kg	SW846 6010B
Molybdenum	1.6 B	4.0	mg/kg	SW846 6010B
Nickel	25.7	4.0	mg/kg	SW846 6010B
Thallium	2.0	1.0	mg/kg	SW846 6010B
Vanadium	76.1	5.0	mg/kg	SW846 6010B
Zinc	99.9	2.0	mg/kg	SW846 6010B
Acetone	1800	1200	ug/kg	SW846 8260B
2-Butanone	6300	1200	ug/kg	SW846 8260B
4-Methyl-2-pentanone	720 J	1200	ug/kg	SW846 8260B

METHODS SUMMARY

E2A240297

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Extractable Petroleum Hydrocarbons	SW846 8015B	SANA AUTO-SHAKE
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E2A240297

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
ER7C4	001	R0#7 1_VEW_6_45	01/16/02	11:45
ER7C5	002	R0#9 1_VEW_7_69	01/21/02	13:00
ER7C6	003	R0#10_1_VEW_21_35	01/23/02	08:40

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: R0#7 1_VEW_6_45

GC Semivolatiles

Lot-Sample #...:	E2A240297-001	Work Order #...:	ER7C41AA	Matrix.....:	SOLID
Date Sampled...:	01/16/02 11:45	Date Received..:	01/24/02 19:30	MS Run #.....:	2025102
Prep Date.....:	01/25/02	Analysis Date..:	01/30/02		
Prep Batch #...:	2025274	Analysis Time..:	01:39		
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	83	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: R0#7 1_VEW_6_45

GC Volatiles

Lot-Sample #...:	E2A240297-001	Work Order #...:	ER7C41AC	Matrix.....:	SOLID
Date Sampled...:	01/16/02 11:45	Date Received..:	01/24/02 19:30	MS Run #.....:	2028207
Prep Date.....:	01/26/02	Analysis Date..:	01/26/02		
Prep Batch #...:	2028371	Analysis Time..:	02:54		
Dilution Factor:	1				
Analyst ID.....:	001464	Instrument ID..:	G13		
		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)	87	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: R0#7 1_VEW_6_45

GC/MS Volatiles

Lot-Sample #...:	E2A240297-001	Work Order #...:	ER7C41A1	Matrix.....:	SOLID
Date Sampled...:	01/16/02 11:45	Date Received..:	01/24/02 19:30	MS Run #.....:	2030185
Prep Date.....:	01/25/02	Analysis Date..:	01/28/02		
Prep Batch #...:	2030344	Analysis Time..:	22:07		
Dilution Factor:	1				
Analyst ID.....:	999998	Instrument ID..:	MSG		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	1200	ug/kg	400
Acrolein	ND	5000	ug/kg	2000
Acrylonitrile	ND	5000	ug/kg	2000
Benzene	ND	250	ug/kg	100
Bromobenzene	ND	250	ug/kg	70
Bromochloromethane	ND	250	ug/kg	110
Bromodichloromethane	ND	250	ug/kg	100
Bromoform	ND	250	ug/kg	100
Bromomethane	ND	500	ug/kg	250
2-Butanone	ND	1200	ug/kg	700
n-Butylbenzene	ND	250	ug/kg	70
sec-Butylbenzene	ND	250	ug/kg	70
tert-Butylbenzene	ND	250	ug/kg	70
Carbon disulfide	ND	250	ug/kg	120
Carbon tetrachloride	ND	250	ug/kg	100
Chlorobenzene	ND	250	ug/kg	100
Dibromochloromethane	ND	250	ug/kg	110
1,2-Dibromo-3-chloro-propane	ND	500	ug/kg	150
Chloroethane	ND	500	ug/kg	250
2-Chloroethyl vinyl ether	ND	500	ug/kg	350
Chloroform	ND	250	ug/kg	70
Chloromethane	ND	500	ug/kg	200
2-Chlorotoluene	ND	250	ug/kg	70
4-Chlorotoluene	ND	250	ug/kg	70
1,2-Dibromoethane	ND	250	ug/kg	70
1,2-Dichlorobenzene	ND	250	ug/kg	100
1,3-Dichlorobenzene	ND	250	ug/kg	70
1,4-Dichlorobenzene	ND	250	ug/kg	100
Dichlorodifluoromethane	ND	500	ug/kg	170
1,1-Dichloroethane	ND	250	ug/kg	100
1,2-Dichloroethane	ND	250	ug/kg	70
1,1-Dichloroethene	ND	250	ug/kg	120
cis-1,2-Dichloroethene	ND	250	ug/kg	120
trans-1,2-Dichloroethene	ND	250	ug/kg	120
1,2-Dichloropropane	ND	250	ug/kg	100
2,2-Dichloropropane	ND	250	ug/kg	100

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: R0#7 1_VEW_6_45

GC/MS Volatiles

Lot-Sample #...: E2A240297-001 Work Order #...: ER7C41A1 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	250	ug/kg	100
cis-1,3-Dichloropropene	ND	250	ug/kg	100
trans-1,3-Dichloropropene	ND	250	ug/kg	70
Ethylbenzene	ND	250	ug/kg	70
Trichlorofluoromethane	ND	500	ug/kg	70
Hexachlorobutadiene	ND	250	ug/kg	70
2-Hexanone	ND	1200	ug/kg	350
Iodomethane	ND	500	ug/kg	250
Isopropylbenzene	ND	250	ug/kg	120
Isopropyl ether	ND	500	ug/kg	100
p-Isopropyltoluene	ND	250	ug/kg	70
Methylene chloride	ND	250	ug/kg	50
4-Methyl-2-pentanone	ND	1200	ug/kg	400
n-Propylbenzene	ND	250	ug/kg	110
Styrene	ND	500	ug/kg	100
1,1,1,2-Tetrachloroethane	ND	250	ug/kg	60
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	100
Tetrachloroethene	ND	250	ug/kg	80
Tetrahydrofuran	ND	1000	ug/kg	500
Toluene	ND	250	ug/kg	60
1,2,3-Trichlorobenzene	ND	250	ug/kg	70
1,2,4-Trichloro-benzene	ND	250	ug/kg	70
1,1,1-Trichloroethane	ND	250	ug/kg	180
1,1,2-Trichloroethane	ND	250	ug/kg	100
Trichloroethene	ND	250	ug/kg	70
1,2,3-Trichloropropane	ND	250	ug/kg	110
1,2,4-Trimethylbenzene	ND	250	ug/kg	70
1,3,5-Trimethylbenzene	ND	250	ug/kg	120
Vinyl acetate	ND	500	ug/kg	380
Vinyl chloride	ND	500	ug/kg	150
Xylenes (total)	ND	250	ug/kg	180
t-Butanol	ND	5000	ug/kg	2500
Methyl tert-butyl ether	ND	250	ug/kg	100
Tert-amyl methyl ether	ND	500	ug/kg	100
Tert-butyl ethyl ether	ND	500	ug/kg	100

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	79	(60 - 140)
1,2-Dichloroethane-d4	80	(60 - 140)
Toluene-d8	82	(60 - 140)

HALEY & ALDRICH INC

Client Sample ID: R0#7 1_VEW_6_45

HPLC

Lot-Sample #...: E2A240297-001 Work Order #...: ER7C41A0 Matrix.....: SOLID
Date Sampled...: 01/16/02 11:45 Date Received..: 01/24/02 19:30 MS Run #.....:
Prep Date.....: 01/29/02 Analysis Date..: 01/31/02
Prep Batch #...: 2045486 Analysis Time..: 00:00
Dilution Factor: 1
Analyst ID.....: 000024 Instrument ID..: N/A
Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	50	ug/kg	
Acenaphthylene	ND	200	ug/kg	
Anthracene	ND	2	ug/kg	
Benzo(a)anthracene	ND	2	ug/kg	
Benzo(b)fluoranthene	ND	5	ug/kg	
Benzo(k)fluoranthene	ND	2	ug/kg	
Benzo(ghi)perylene	ND	5	ug/kg	
Benzo(a)pyrene	ND	2	ug/kg	
Chrysene	ND	5	ug/kg	
Dibenz(a,h)anthracene	ND	5	ug/kg	
Fluoranthene	ND	5	ug/kg	
Fluorene	**5.4**	**5**	**ug/kg**	
Indeno(1,2,3-cd)pyrene	ND	5	ug/kg	
Naphthalene	ND	40	ug/kg	
Phenanthrene	ND	5	ug/kg	
Pyrene	ND	5	ug/kg	

HALEY & ALDRICH INC

Client Sample ID: R0#9 1_VEW_7_69

GC Semivolatiles

Lot-Sample #...:	E2A240297-002	Work Order #...:	ER7C51AD	Matrix.....:	SOLID
Date Sampled...:	01/21/02 13:00	Date Received..:	01/24/02 19:30	MS Run #.....:	2025102
Prep Date.....:	01/25/02	Analysis Date..:	01/30/02		
Prep Batch #...:	2025274	Analysis Time..:	02:17		
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	85	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: R0#9 1_VEW_7_69

GC Volatiles

Lot-Sample #...:	E2A240297-002	Work Order #...:	ER7C51AE	Matrix.....:	SOLID
Date Sampled...:	01/21/02 13:00	Date Received..:	01/24/02 19:30	MS Run #.....:	2028207
Prep Date.....:	01/26/02	Analysis Date..:	01/26/02		
Prep Batch #...:	2028371	Analysis Time..:	03:22		
Dilution Factor:	1				
Analyst ID.....:	001464	Instrument ID..:	G13		
		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)	90	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: R0#9 1_VEW_7_69

GC/MS Volatiles

Lot-Sample #...: E2A240297-002 Work Order #...: ER7C51AC Matrix.....: SOLID
Date Sampled...: 01/21/02 13:00 Date Received..: 01/24/02 19:30 MS Run #.....: 2030185
Prep Date.....: 01/25/02 Analysis Date..: 01/28/02
Prep Batch #...: 2030344 Analysis Time..: 22:41
Dilution Factor: 1
Analyst ID.....: 999998 Instrument ID..: MSG
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**1400**	**1200**	**ug/kg**	**400**
Acrolein	ND	5000	ug/kg	2000
Acrylonitrile	ND	5000	ug/kg	2000
Benzene	ND	250	ug/kg	100
Bromobenzene	ND	250	ug/kg	70
Bromochloromethane	ND	250	ug/kg	110
Bromodichloromethane	ND	250	ug/kg	100
Bromoform	ND	250	ug/kg	100
Bromomethane	ND	500	ug/kg	250
2-Butanone	**4900**	**1200**	**ug/kg**	**700**
n-Butylbenzene	ND	250	ug/kg	70
sec-Butylbenzene	ND	250	ug/kg	70
tert-Butylbenzene	ND	250	ug/kg	70
Carbon disulfide	ND	250	ug/kg	120
Carbon tetrachloride	ND	250	ug/kg	100
Chlorobenzene	ND	250	ug/kg	100
Dibromochloromethane	ND	250	ug/kg	110
1,2-Dibromo-3-chloro-propane	ND	500	ug/kg	150
Chloroethane	ND	500	ug/kg	250
2-Chloroethyl vinyl ether	ND	500	ug/kg	350
Chloroform	ND	250	ug/kg	70
Chloromethane	ND	500	ug/kg	200
2-Chlorotoluene	ND	250	ug/kg	70
4-Chlorotoluene	ND	250	ug/kg	70
1,2-Dibromoethane	ND	250	ug/kg	70
1,2-Dichlorobenzene	ND	250	ug/kg	100
1,3-Dichlorobenzene	ND	250	ug/kg	70
1,4-Dichlorobenzene	ND	250	ug/kg	100
Dichlorodifluoromethane	ND	500	ug/kg	170
1,1-Dichloroethane	ND	250	ug/kg	100
1,2-Dichloroethane	ND	250	ug/kg	70
1,1-Dichloroethene	ND	250	ug/kg	120
cis-1,2-Dichloroethene	ND	250	ug/kg	120
trans-1,2-Dichloroethene	ND	250	ug/kg	120
1,2-Dichloropropane	ND	250	ug/kg	100
2,2-Dichloropropane	ND	250	ug/kg	100

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: R0#9 1_VEW_7_69

GC/MS Volatiles

Lot-Sample #...: E2A240297-002 Work Order #...: ER7C51AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	250	ug/kg	100
cis-1,3-Dichloropropene	ND	250	ug/kg	100
trans-1,3-Dichloropropene	ND	250	ug/kg	70
Ethylbenzene	ND	250	ug/kg	70
Trichlorofluoromethane	ND	500	ug/kg	70
Hexachlorobutadiene	ND	250	ug/kg	70
2-Hexanone	ND	1200	ug/kg	350
Iodomethane	ND	500	ug/kg	250
Isopropylbenzene	ND	250	ug/kg	120
Isopropyl ether	ND	500	ug/kg	100
p-Isopropyltoluene	ND	250	ug/kg	70
Methylene chloride	ND	250	ug/kg	50
4-Methyl-2-pentanone	**520 J**	**1200**	**ug/kg**	**400**
n-Propylbenzene	ND	250	ug/kg	110
Styrene	ND	500	ug/kg	100
1,1,1,2-Tetrachloroethane	ND	250	ug/kg	60
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	100
Tetrachloroethene	ND	250	ug/kg	80
Tetrahydrofuran	ND	1000	ug/kg	500
Toluene	ND	250	ug/kg	60
1,2,3-Trichlorobenzene	ND	250	ug/kg	70
1,2,4-Trichloro-benzene	ND	250	ug/kg	70
1,1,1-Trichloroethane	ND	250	ug/kg	180
1,1,2-Trichloroethane	ND	250	ug/kg	100
Trichloroethene	ND	250	ug/kg	70
1,2,3-Trichloropropane	ND	250	ug/kg	110
1,2,4-Trimethylbenzene	ND	250	ug/kg	70
1,3,5-Trimethylbenzene	ND	250	ug/kg	120
Vinyl acetate	ND	500	ug/kg	380
Vinyl chloride	ND	500	ug/kg	150
Xylenes (total)	ND	250	ug/kg	180
t-Butanol	ND	5000	ug/kg	2500
Methyl tert-butyl ether	ND	250	ug/kg	100
Tert-amyl methyl ether	ND	500	ug/kg	100
Tert-butyl ethyl ether	ND	500	ug/kg	100

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	83	(60 - 140)
1,2-Dichloroethane-d4	79	(60 - 140)
Toluene-d8	84	(60 - 140)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: R0#9 1_VEW_7_69

HPLC

Lot-Sample #...: E2A240297-002 Work Order #...: ER7C51AA Matrix.....: SOLID
Date Sampled...: 01/21/02 13:00 Date Received..: 01/24/02 19:30 MS Run #.....:
Prep Date.....: 01/30/02 Analysis Date..: 02/01/02
Prep Batch #...: 2045486 Analysis Time..: 00:00
Dilution Factor: 1
Analyst ID.....: 000024 Instrument ID..: N/A
Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	50	ug/kg	
Acenaphthylene	ND	200	ug/kg	
Anthracene	ND	2	ug/kg	
Benzo(a)anthracene	ND	2	ug/kg	
Benzo(b)fluoranthene	ND	5	ug/kg	
Benzo(k)fluoranthene	ND	2	ug/kg	
Benzo(ghi)perylene	ND	5	ug/kg	
Benzo(a)pyrene	ND	2	ug/kg	
Chrysene	ND	5	ug/kg	
Dibenz(a,h)anthracene	ND	5	ug/kg	
Fluoranthene	ND	5	ug/kg	
Fluorene	ND	5	ug/kg	
Indeno(1,2,3-cd)pyrene	ND	5	ug/kg	
Naphthalene	ND	40	ug/kg	
Phenanthrene	ND	5	ug/kg	
Pyrene	ND	5	ug/kg	

HALEY & ALDRICH INC

Client Sample ID: R0#10_1_VEW_21_35

GC Semivolatiles

Lot-Sample #...:	E2A240297-003	Work Order #...:	ER7C61AD	Matrix.....:	SOLID
Date Sampled...:	01/23/02 08:40	Date Received..:	01/24/02 19:30	MS Run #.....:	2025102
Prep Date.....:	01/25/02	Analysis Date..:	01/30/02		
Prep Batch #...:	2025274	Analysis Time..:	02:56		
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	71	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: R0#10_1_VEW_21_35

GC Volatiles

Lot-Sample #...:	E2A240297-003	Work Order #...:	ER7C61AE	Matrix.....:	SOLID
Date Sampled...:	01/23/02 08:40	Date Received..:	01/24/02 19:30	MS Run #.....:	
Prep Date.....:	01/26/02	Analysis Date..:	01/26/02		
Prep Batch #...:	2028413	Analysis Time..:	21:22		
Dilution Factor:	2				
Analyst ID.....:	001464	Instrument ID..:	G13		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	79	20	mg/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	119	(75 - 135)

NOTE(S):

Unknown peaks were detected.

HALEY & ALDRICH INC

Client Sample ID: R0#10_1_VEW_21_35

GC/MS Volatiles

Lot-Sample #...: E2A240297-003 Work Order #...: ER7C61AC Matrix.....: SOLID
Date Sampled...: 01/23/02 08:40 Date Received..: 01/24/02 19:30 MS Run #.....: 2030185
Prep Date.....: 01/25/02 Analysis Date..: 01/29/02
Prep Batch #...: 2030344 Analysis Time..: 14:14
Dilution Factor: 1
Analyst ID.....: 999998 Instrument ID..: MSG
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**1800**	**1200**	**ug/kg**	**400**
Acrolein	ND	5000	ug/kg	2000
Acrylonitrile	ND	5000	ug/kg	2000
Benzene	ND	250	ug/kg	100
Bromobenzene	ND	250	ug/kg	70
Bromochloromethane	ND	250	ug/kg	110
Bromodichloromethane	ND	250	ug/kg	100
Bromoform	ND	250	ug/kg	100
Bromomethane	ND	500	ug/kg	250
2-Butanone	**6300**	**1200**	**ug/kg**	**700**
n-Butylbenzene	ND	250	ug/kg	70
sec-Butylbenzene	ND	250	ug/kg	70
tert-Butylbenzene	ND	250	ug/kg	70
Carbon disulfide	ND	250	ug/kg	120
Carbon tetrachloride	ND	250	ug/kg	100
Chlorobenzene	ND	250	ug/kg	100
Dibromochloromethane	ND	250	ug/kg	110
1,2-Dibromo-3-chloro-propane	ND	500	ug/kg	150
Chloroethane	ND	500	ug/kg	250
2-Chloroethyl vinyl ether	ND	500	ug/kg	350
Chloroform	ND	250	ug/kg	70
Chloromethane	ND	500	ug/kg	200
2-Chlorotoluene	ND	250	ug/kg	70
4-Chlorotoluene	ND	250	ug/kg	70
1,2-Dibromoethane	ND	250	ug/kg	70
1,2-Dichlorobenzene	ND	250	ug/kg	100
1,3-Dichlorobenzene	ND	250	ug/kg	70
1,4-Dichlorobenzene	ND	250	ug/kg	100
Dichlorodifluoromethane	ND	500	ug/kg	170
1,1-Dichloroethane	ND	250	ug/kg	100
1,2-Dichloroethane	ND	250	ug/kg	70
1,1-Dichloroethene	ND	250	ug/kg	120
cis-1,2-Dichloroethene	ND	250	ug/kg	120
trans-1,2-Dichloroethene	ND	250	ug/kg	120
1,2-Dichloropropane	ND	250	ug/kg	100
2,2-Dichloropropane	ND	250	ug/kg	100

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: R0#10_1_VEW_21_35

GC/MS Volatiles

Lot-Sample #...: E2A240297-003 Work Order #...: ER7C61AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	250	ug/kg	100
cis-1,3-Dichloropropene	ND	250	ug/kg	100
trans-1,3-Dichloropropene	ND	250	ug/kg	70
Ethylbenzene	ND	250	ug/kg	70
Trichlorofluoromethane	ND	500	ug/kg	70
Hexachlorobutadiene	ND	250	ug/kg	70
2-Hexanone	ND	1200	ug/kg	350
Iodomethane	ND	500	ug/kg	250
Isopropylbenzene	ND	250	ug/kg	120
Isopropyl ether	ND	500	ug/kg	100
p-Isopropyltoluene	ND	250	ug/kg	70
Methylene chloride	ND	250	ug/kg	50
4-Methyl-2-pentanone	**720 J**	**1200**	**ug/kg**	**400**
n-Propylbenzene	ND	250	ug/kg	110
Styrene	ND	500	ug/kg	100
1,1,1,2-Tetrachloroethane	ND	250	ug/kg	60
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	100
Tetrachloroethene	ND	250	ug/kg	80
Tetrahydrofuran	ND	1000	ug/kg	500
Toluene	ND	250	ug/kg	60
1,2,3-Trichlorobenzene	ND	250	ug/kg	70
1,2,4-Trichloro-benzene	ND	250	ug/kg	70
1,1,1-Trichloroethane	ND	250	ug/kg	180
1,1,2-Trichloroethane	ND	250	ug/kg	100
Trichloroethene	ND	250	ug/kg	70
1,2,3-Trichloropropane	ND	250	ug/kg	110
1,2,4-Trimethylbenzene	ND	250	ug/kg	70
1,3,5-Trimethylbenzene	ND	250	ug/kg	120
Vinyl acetate	ND	500	ug/kg	380
Vinyl chloride	ND	500	ug/kg	150
Xylenes (total)	ND	250	ug/kg	180
t-Butanol	ND	5000	ug/kg	2500
Methyl tert-butyl ether	ND	250	ug/kg	100
Tert-amyl methyl ether	ND	500	ug/kg	100
Tert-butyl ethyl ether	ND	500	ug/kg	100

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	86	(60 - 140)
1,2-Dichloroethane-d4	99	(60 - 140)
Toluene-d8	89	(60 - 140)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: R0#10_1_VEW_21_35

HPLC

Lot-Sample #...:	E2A240297-003	Work Order #...:	ER7C61AA	Matrix.....:	SOLID
Date Sampled...:	01/23/02 08:40	Date Received..:	01/24/02 19:30	MS Run #.....:	
Prep Date.....:	01/30/02	Analysis Date..:	02/01/02		
Prep Batch #...:	2045486	Analysis Time..:	00:00		
Dilution Factor:	1				
Analyst ID.....:	000024	Instrument ID..:	N/A		
		Method.....:	SW846 8310		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	50	ug/kg	
Acenaphthylene	ND	200	ug/kg	
Anthracene	ND	2	ug/kg	
Benzo(a)anthracene	ND	2	ug/kg	
Benzo(b)fluoranthene	ND	5	ug/kg	
Benzo(k)fluoranthene	ND	2	ug/kg	
Benzo(ghi)perylene	ND	5	ug/kg	
Benzo(a)pyrene	ND	2	ug/kg	
Chrysene	ND	5	ug/kg	
Dibenz(a,h)anthracene	ND	5	ug/kg	
Fluoranthene	ND	5	ug/kg	
Fluorene	7.6	5	ug/kg	
Indeno(1,2,3-cd)pyrene	ND	5	ug/kg	
Naphthalene	ND	40	ug/kg	
Phenanthrene	ND	5	ug/kg	
Pyrene	ND	5	ug/kg	

HALEY & ALDRICH INC

R0#7 1_VEW_6_45

GC/MS Volatiles

Lot-Sample #: E2A240297-001 Work Order #: ER7C41A1 Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

R0#9 1_VEW_7_69

GC/MS Volatiles

Lot-Sample #: E2A240297-002 Work Order #: ER7C51AC Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

R0#10_1_VEW_21_35

GC/MS Volatiles

Lot-Sample #: E2A240297-003 Work Order #: ER7C61AC Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Method Blank Report

GC/MS Volatiles

Lot-Sample #: E2A300000-344 B Work Order #: ETFP61AA Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: R0#7 1_VEW_6_45

TOTAL Metals

Lot-Sample #...: E2A240297-001 Matrix.....: SOLID
Date Sampled...: 01/16/02 11:45 Date Received..: 01/24/02 19:30

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2025243						
Mercury	0.037 B	0.10	mg/kg	SW846 7471A	01/29-01/30/02	ER7C41AX
		Dilution Factor: 1		Analysis Time..: 17:45	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 2031105	MDL.....: 0.020	
Prep Batch #...: 2025334						
Aluminum	24100	20.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AD
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 8.0	
Arsenic	7.5	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AE
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AF
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.60	
Barium	184	2.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AG
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Cadmium	1.3	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AH
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.060	
Chromium	33.6	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AJ
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Beryllium	0.76	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AK
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.050	
Lead	6.7	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AL
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.30	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: R0#7 1_VEW_6_45

TOTAL Metals

Lot-Sample #...: E2A240297-001 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	ND	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AM
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AN
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Cobalt	11.7	5.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AP
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Copper	31.1	2.5	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AQ
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.40	
Molybdenum	1.5 B	4.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AR
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.30	
Nickel	22.1	4.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AT
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.30	
Thallium	2.0	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AU
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.80	
Vanadium	64.8	5.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AV
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Zinc	85.2	2.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C41AW
		Dilution Factor: 1		Analysis Time..: 04:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 1.0	

NOTE(S):

B Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: R0#9 1_VEW_7_69

TOTAL Metals

Lot-Sample #...: E2A240297-002 Matrix.....: SOLID
Date Sampled...: 01/21/02 13:00 Date Received..: 01/24/02 19:30

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2025243						
Mercury	0.17	0.10	mg/kg	SW846 7471A	01/29-01/30/02	ER7C51A1
		Dilution Factor: 1		Analysis Time..: 17:46	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 2031105	MDL.....: 0.020	
Prep Batch #...: 2025334						
Aluminum	16100	20.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AF
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 8.0	
Arsenic	15.3	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AG
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AH
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.60	
Barium	100	2.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AJ
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AK
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.060	
Chromium	30.9	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AL
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Beryllium	0.56	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AM
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.050	
Lead	5.2	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AN
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.30	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: R0#9 1_VEW_7_69

TOTAL Metals

Lot-Sample #...: E2A240297-002 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	0.58	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AP
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AQ
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Cobalt	9.9	5.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AR
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Copper	21.1	2.5	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AT
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.40	
Molybdenum	1.3 B	4.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AU
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.30	
Nickel	17.6	4.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AV
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.30	
Thallium	1.3	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AW
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.80	
Vanadium	46.7	5.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51AX
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Zinc	56.7	2.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C51A0
		Dilution Factor: 1		Analysis Time..: 05:09	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 1.0	

NOTE(S):

B Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: R0#10_1_VEW_21_35

TOTAL Metals

Lot-Sample #...: E2A240297-003 Matrix.....: SOLID
Date Sampled...: 01/23/02 08:40 Date Received..: 01/24/02 19:30

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2025243						
Mercury	0.071 B	0.10	mg/kg	SW846 7471A	01/29-01/30/02	ER7C61A1
		Dilution Factor: 1		Analysis Time..: 17:48	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 2031105	MDL.....: 0.020	
Prep Batch #...: 2025334						
Aluminum	34500	20.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AF
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 8.0	
Arsenic	4.5	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AG
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AH
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.60	
Barium	182	2.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AJ
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AK
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.060	
Chromium	39.1	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AL
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Beryllium	1.1	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AM
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.050	
Lead	8.7	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AN
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.30	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: R0#10_1_VEW_21_35

TOTAL Metals

Lot-Sample #...: E2A240297-003 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	0.90	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AP
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AQ
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Cobalt	14.9	5.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AR
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Copper	39.2	2.5	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AT
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.40	
Molybdenum	1.6 B	4.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AU
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.30	
Nickel	25.7	4.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AV
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.30	
Thallium	2.0	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AW
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.80	
Vanadium	76.1	5.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61AX
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 0.10	
Zinc	99.9	2.0	mg/kg	SW846 6010B	01/26-01/27/02	ER7C61A0
		Dilution Factor: 1		Analysis Time..: 05:17	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2025157	MDL.....: 1.0	

NOTE(S):

B Estimated result. Result is less than RL.

SEVERN
TRENT
SERVICES

QA/QC

000033

QC DATA ASSOCIATION SUMMARY

E2A240297

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 8015B		2025274	2025102
	SOLID	SW846 8015B		2028371	2028207
	SOLID	SW846 7471A		2025243	2031105
	SOLID	SW846 8260B		2030344	2030185
	SOLID	SW846 6010B		2025334	2025157
	SOLID	SW846 8310		2045486	
002	SOLID	SW846 8015B		2025274	2025102
	SOLID	SW846 8015B		2028371	2028207
	SOLID	SW846 7471A		2025243	2031105
	SOLID	SW846 8260B		2030344	2030185
	SOLID	SW846 6010B		2025334	2025157
	SOLID	SW846 8310		2045486	
003	SOLID	SW846 8015B		2025274	2025102
	SOLID	SW846 8015B		2028413	
	SOLID	SW846 7471A		2025243	2031105
	SOLID	SW846 8260B		2030344	2030185
	SOLID	SW846 6010B		2025334	2025157
	SOLID	SW846 8310		2045486	

QC DATA ASSOCIATION SUMMARY

E2A240297

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 8015B		2025274	2025102
	SOLID	SW846 8015B		2028371	2028207
	SOLID	SW846 7471A		2025243	2031105
	SOLID	SW846 8260B		2030344	2030185
	SOLID	SW846 6010B		2025334	2025157
	SOLID	SW846 8310		2045486	
002	SOLID	SW846 8015B		2025274	2025102
	SOLID	SW846 8015B		2028371	2028207
	SOLID	SW846 7471A		2025243	2031105
	SOLID	SW846 8260B		2030344	2030185
	SOLID	SW846 6010B		2025334	2025157
	SOLID	SW846 8310		2045486	
003	SOLID	SW846 8015B		2025274	2025102
	SOLID	SW846 8015B		2028413	
	SOLID	SW846 7471A		2025243	2031105
	SOLID	SW846 8260B		2030344	2030185
	SOLID	SW846 6010B		2025334	2025157
	SOLID	SW846 8310		2045486	

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E2A240297
MB Lot-Sample #: E2A250000-274

Analysis Date..: 01/26/02
Dilution Factor: 1

Work Order #...: ER79V1AA

Prep Date.....: 01/25/02
Prep Batch #...: 2025274

Analyst ID.....: 018568

Matrix.....: SOLID

Analysis Time..: 21:15
Instrument ID..: G01

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
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 Semivolatiles

Client Lot #...: E2A240297
MB Lot-Sample #: E2A250000-274

Work Order #...: ER79V1AD

Matrix.....: SOLID

Prep Date.....: 01/25/02

Analysis Time..: 00:21

Analysis Date..: 01/30/02

Prep Batch #...: 2025274

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	86	(60 - 130)

NOTE(S):

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

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E2A240297
MB Lot-Sample #: E2A280000-371

Analysis Date..: 01/26/02
Dilution Factor: 1

Work Order #...: ETCDA1AA

Prep Date.....: 01/26/02
Prep Batch #...: 2028371

Analyst ID.....: 001464

Matrix.....: SOLID

Analysis Time..: 02:26
Instrument ID..: G13

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

GC Volatiles

Client Lot #...: E2A240297
MB Lot-Sample #: E2A280000-413

Analysis Date..: 01/26/02
Dilution Factor: 1

Work Order #...: ETCH61AA

Prep Date.....: 01/26/02
Prep Batch #...: 2028413

Analyst ID.....: 001464

Matrix.....: SOLID

Analysis Time..: 22:45
Instrument ID..: G13

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
C6-C8	ND	10	mg/kg	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	93	(75 - 135)

NOTE(S):

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

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2A240297
MB Lot-Sample #: E2A300000-344

Work Order #...: ETFP61AA

Matrix.....: SOLID

Prep Date.....: 01/25/02

Analysis Time..: 21:33

Analysis Date..: 01/28/02

Prep Batch #...: 2030344

Instrument ID..: MSG

Dilution Factor: 1

Analyst ID.....: 999998

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	1200	ug/kg	SW846 8260B
Acrolein	ND	5000	ug/kg	SW846 8260B
Acrylonitrile	ND	5000	ug/kg	SW846 8260B
Benzene	ND	250	ug/kg	SW846 8260B
Bromobenzene	ND	250	ug/kg	SW846 8260B
Bromochloromethane	ND	250	ug/kg	SW846 8260B
Bromodichloromethane	ND	250	ug/kg	SW846 8260B
Bromoform	ND	250	ug/kg	SW846 8260B
Bromomethane	ND	500	ug/kg	SW846 8260B
2-Butanone	ND	1200	ug/kg	SW846 8260B
n-Butylbenzene	ND	250	ug/kg	SW846 8260B
sec-Butylbenzene	ND	250	ug/kg	SW846 8260B
tert-Butylbenzene	ND	250	ug/kg	SW846 8260B
Carbon disulfide	ND	250	ug/kg	SW846 8260B
Carbon tetrachloride	ND	250	ug/kg	SW846 8260B
Chlorobenzene	ND	250	ug/kg	SW846 8260B
Dibromochloromethane	ND	250	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	500	ug/kg	SW846 8260B
Chloroethane	ND	500	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	500	ug/kg	SW846 8260B
Chloroform	ND	250	ug/kg	SW846 8260B
Chloromethane	ND	500	ug/kg	SW846 8260B
2-Chlorotoluene	ND	250	ug/kg	SW846 8260B
4-Chlorotoluene	ND	250	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	500	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	250	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2A240297 Work Order #...: ETFP61AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Ethylbenzene	ND	250	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	500	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	250	ug/kg	SW846 8260B
2-Hexanone	ND	1200	ug/kg	SW846 8260B
Iodomethane	ND	500	ug/kg	SW846 8260B
Isopropylbenzene	ND	250	ug/kg	SW846 8260B
Isopropyl ether	ND	500	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	250	ug/kg	SW846 8260B
Methylene chloride	ND	250	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	1200	ug/kg	SW846 8260B
n-Propylbenzene	ND	250	ug/kg	SW846 8260B
Styrene	ND	500	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
Tetrachloroethene	ND	250	ug/kg	SW846 8260B
Tetrahydrofuran	ND	1000	ug/kg	SW846 8260B
Toluene	ND	250	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	250	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	250	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	250	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	250	ug/kg	SW846 8260B
Trichloroethene	ND	250	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	250	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
Vinyl acetate	ND	500	ug/kg	SW846 8260B
Vinyl chloride	ND	500	ug/kg	SW846 8260B
Xylenes (total)	ND	250	ug/kg	SW846 8260B
t-Butanol	ND	5000	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	250	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	91	(60 - 140)
1,2-Dichloroethane-d4	77	(60 - 140)
Toluene-d8	91	(60 - 140)

NOTE(S):

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

000040

METHOD BLANK REPORT

HPLC

Client Lot #...: E2A240297
MB Lot-Sample #: E2B140000-486

Analysis Date..: 01/30/02
Dilution Factor: 1

Work Order #...: ET6C11AA

Prep Date.....: 01/29/02
Prep Batch #...: 2045486

Analyst ID.....: 000024

Matrix.....: SOLID

Analysis Time..: 00:00
Instrument ID..: N/A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	50	ug/kg	SW846 8310
Acenaphthylene	ND	200	ug/kg	SW846 8310
Anthracene	ND	2.0	ug/kg	SW846 8310
Benzo(a)anthracene	ND	2.0	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	5.0	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	2.0	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	5.0	ug/kg	SW846 8310
Benzo(a)pyrene	ND	2.0	ug/kg	SW846 8310
Chrysene	ND	5.0	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	5.0	ug/kg	SW846 8310
Fluoranthene	ND	5.0	ug/kg	SW846 8310
Fluorene	ND	5.0	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/kg	SW846 8310
Naphthalene	ND	40	ug/kg	SW846 8310
Phenanthrene	ND	5.0	ug/kg	SW846 8310
Pyrene	ND	5.0	ug/kg	SW846 8310

NOTE(S):

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E2A240297 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E2A250000-243 Prep Batch #...: 2025243						
Mercury	ND	0.10	mg/kg	SW846 7471A	01/29-01/30/02	ER72E1AA
		Dilution Factor: 1				
		Analysis Time..: 17:32		Analyst ID.....: 000023	Instrument ID..: M04	
MB Lot-Sample #: E2A250000-334 Prep Batch #...: 2025334						
Aluminum	ND	20.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AA
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AC
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AD
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	ND	2.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AE
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	ND	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AF
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	ND	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AG
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	ND	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AH
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	ND	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AJ
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AK
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E2A240297 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AL
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AM
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Copper	ND	2.5	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AN
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	ND	4.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AP
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AQ
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AR
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AT
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B	01/26-01/27/02	ER8LP1AU
		Dilution Factor: 1				
		Analysis Time..: 04:03		Analyst ID.....: 021088	Instrument ID..: M01	

NOTE(S):

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

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E2A240297
LCS Lot-Sample#: E2A280000-413
Prep Date.....: 01/26/02
Prep Batch #...: 2028413
Dilution Factor: 1
Analyst ID.....: 001464

Work Order #...: ETCH61AC-LCS
ETCH61AD-LCSD
Analysis Date..: 01/26/02
Analysis Time..: 21:49
Instrument ID..: G13

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Gasoline)	50.0	54.0	mg/kg	108		SW846 8015B
	50.0	55.4	mg/kg	111	2.5	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	119	(75 - 135)
	120	(75 - 135)

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 #...: E2A240297
LCS Lot-Sample#: E2A280000-413
Prep Date.....: 01/26/02
Prep Batch #...: 2028413
Dilution Factor: 1
Analyst ID.....: 001464

Work Order #...: ETCH61AC-LCS
ETCH61AD-LCSD
Analysis Date..: 01/26/02
Analysis Time..: 21:49
Instrument ID..: G13

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	108	(80 - 140)			SW846 8015B
	111	(80 - 140)	2.5	(0-40)	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	119	(75 - 135)
	120	(75 - 135)

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 Semivolatiles

Client Lot #...: E2A240297 Work Order #...: ER79V1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A250000-274
Prep Date.....: 01/25/02 Analysis Date..: 01/26/02
Prep Batch #...: 2025274 Analysis Time..: 21:53
Dilution Factor: 1 Instrument ID..: G01
Analyst ID.....: 018568

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Diesel)	250	207	mg/kg	83	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.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E2A240297 Work Order #...: ER79V1AE Matrix.....: SOLID
LCS Lot-Sample#: E2A250000-274
Prep Date.....: 01/25/02 Analysis Date..: 01/30/02
Prep Batch #...: 2025274 Analysis Time..: 01:00
Dilution Factor: 1 Instrument ID..: G02
Analyst ID.....: 356074

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Diesel)	250	207	mg/kg	83	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	85	(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 #...: E2A240297
LCS Lot-Sample#: E2A280000-371
Prep Date.....: 01/26/02
Prep Batch #...: 2028371
Dilution Factor: 1
Analyst ID.....: 001464

Work Order #...: ETCDA1AC
Analysis Date..: 01/26/02
Analysis Time..: 01:58
Instrument ID..: G13

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Gasoline)	5.00	5.74	mg/kg	115	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 #...: E2A240297 Work Order #...: ETFP61AC Matrix.....: SOLID
LCS Lot-Sample#: E2A300000-344
Prep Date.....: 01/25/02 Analysis Date..: 01/28/02
Prep Batch #...: 2030344 Analysis Time..: 20:24
Dilution Factor: 1 Instrument ID..: MSG
Analyst ID.....: 999998

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Benzene	2500	2140	ug/kg	86	SW846 8260B
Chlorobenzene	2500	2230	ug/kg	89	SW846 8260B
1,1-Dichloroethene	2500	2080	ug/kg	83	SW846 8260B
Toluene	2500	2190	ug/kg	88	SW846 8260B
Trichloroethene	2500	2240	ug/kg	90	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	87	(60 - 140)
1,2-Dichloroethane-d4	85	(60 - 140)
Toluene-d8	91	(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 #...: E2A240297 Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E2A250000-243 Prep Batch #...: 2025243							
Mercury	0.833	0.880	mg/kg	106	SW846 7471A	01/29-01/30/02	ER72E1AC
			Dilution Factor: 1				
			Analysis Time..: 17:34		Analyst ID.....: 000023	Instrument ID..: M04	
LCS Lot-Sample#: E2A250000-334 Prep Batch #...: 2025334							
Aluminum	200	195	mg/kg	97	SW846 6010B	01/26-01/27/02	ER8LP1AV
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	200	197	mg/kg	99	SW846 6010B	01/26-01/27/02	ER8LP1AW
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	50.0	47.7	mg/kg	95	SW846 6010B	01/26-01/27/02	ER8LP1AX
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	200	198	mg/kg	99	SW846 6010B	01/26-01/27/02	ER8LP1A0
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	5.00	5.01	mg/kg	100	SW846 6010B	01/26-01/27/02	ER8LP1A1
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	20.0	20.0	mg/kg	100	SW846 6010B	01/26-01/27/02	ER8LP1A2
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	5.00	5.39	mg/kg	108	SW846 6010B	01/26-01/27/02	ER8LP1A3
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	50.0	48.8	mg/kg	98	SW846 6010B	01/26-01/27/02	ER8LP1A4
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	200	197	mg/kg	98	SW846 6010B	01/26-01/27/02	ER8LP1A5
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2A240297 Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	5.00	4.98	mg/kg	100	SW846 6010B	01/26-01/27/02	ER8LP1A6
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	50.0	49.4	mg/kg	99	SW846 6010B	01/26-01/27/02	ER8LP1A7
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Copper	25.0	23.9	mg/kg	96	SW846 6010B	01/26-01/27/02	ER8LP1A8
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	100	98.4	mg/kg	98	SW846 6010B	01/26-01/27/02	ER8LP1A9
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	50.0	50.1	mg/kg	100	SW846 6010B	01/26-01/27/02	ER8LP1CA
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	200	190	mg/kg	95	SW846 6010B	01/26-01/27/02	ER8LP1CC
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	50.0	50.1	mg/kg	100	SW846 6010B	01/26-01/27/02	ER8LP1CD
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	50.0	50.9	mg/kg	102	SW846 6010B	01/26-01/27/02	ER8LP1CE
			Dilution Factor: 1				
			Analysis Time..: 04:09		Analyst ID.....: 021088	Instrument ID..: M01	

NOTE(S):

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E2A240297 Work Order #...: ER79V1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A250000-274
Prep Date.....: 01/25/02 Analysis Date..: 01/26/02
Prep Batch #...: 2025274 Analysis Time..: 21:53
Dilution Factor: 1 Instrument ID..: G01
Analyst ID.....: 018568

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**83**	**(55 - 130)**	**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.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E2A240297 Work Order #...: ER79V1AE Matrix.....: SOLID
LCS Lot-Sample#: E2A250000-274
Prep Date.....: 01/25/02 Analysis Date..: 01/30/02
Prep Batch #...: 2025274 Analysis Time..: 01:00
Dilution Factor: 1 Instrument ID..: G02
Analyst ID.....: 356074

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	83	(55 - 130)	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	85	(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 #...: E2A240297 Work Order #...: ETCDA1AC Matrix.....: SOLID
LCS Lot-Sample#: E2A280000-371
Prep Date.....: 01/26/02 Analysis Date..: 01/26/02
Prep Batch #...: 2028371 Analysis Time..: 01:58
Dilution Factor: 1 Instrument ID..: G13
Analyst ID.....: 001464

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Gasoline)	115	(70 - 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 #...: E2A240297 Work Order #...: ETFP61AC Matrix.....: SOLID
LCS Lot-Sample#: E2A300000-344
Prep Date.....: 01/25/02 Analysis Date..: 01/28/02
Prep Batch #...: 2030344 Analysis Time..: 20:24
Dilution Factor: 1 Instrument ID..: MSG
Analyst ID.....: 999998

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	86	(60 - 135)	SW846 8260B
Chlorobenzene	89	(60 - 125)	SW846 8260B
1,1-Dichloroethene	83	(60 - 145)	SW846 8260B
Toluene	88	(60 - 125)	SW846 8260B
Trichloroethene	90	(60 - 140)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	87	(60 - 140)
1,2-Dichloroethane-d4	85	(60 - 140)
Toluene-d8	91	(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 #...: E2A240297 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E2A250000-243 Prep Batch #...: 2025243					
Mercury	106	(85 - 115)	SW846 7471A	01/29-01/30/02	ER72E1AC
		Dilution Factor: 1			
		Analysis Time..: 17:34	Analyst ID.....: 000023	Instrument ID..: M04	
LCS Lot-Sample#: E2A250000-334 Prep Batch #...: 2025334					
Aluminum	97	(70 - 115)	SW846 6010B	01/26-01/27/02	ER8LP1AV
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	99	(75 - 115)	SW846 6010B	01/26-01/27/02	ER8LP1AW
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	95	(75 - 115)	SW846 6010B	01/26-01/27/02	ER8LP1AX
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Barium	99	(80 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1A0
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	100	(80 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1A1
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	100	(85 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1A2
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	108	(80 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1A3
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Lead	98	(80 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1A4
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	98	(70 - 115)	SW846 6010B	01/26-01/27/02	ER8LP1A5
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2A240297 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	100	(80 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1A6
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	99	(80 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1A7
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Copper	96	(80 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1A8
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	98	(80 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1A9
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	100	(80 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1CA
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	95	(75 - 125)	SW846 6010B	01/26-01/27/02	ER8LP1CC
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	100	(80 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1CD
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	102	(80 - 120)	SW846 6010B	01/26-01/27/02	ER8LP1CE
		Dilution Factor: 1			
		Analysis Time..: 04:09	Analyst ID.....: 021088	Instrument ID..: M01	

NOTE(S):

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

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...:	E2A240297	Work Order #...:	ER5DM1AD-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A230278-009		ER5DM1AE-MSD		
Date Sampled...:	01/23/02 09:20	Date Received..:	01/23/02 18:30	MS Run #.....:	2025102
Prep Date.....:	01/25/02	Analysis Date..:	01/26/02		
Prep Batch #...:	2025274	Analysis Time..:	23:10		
Dilution Factor:	1	Analyst ID.....:	018568	Instrument ID..:	G01

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
TPH (as Diesel)	ND	250	210	mg/kg	84		SW846 8015B
	ND	250	207	mg/kg	83	1.6	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	92	(60 - 130)
	90	(60 - 130)

NOTE(S):

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

Bold print denotes control parameters

000058

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2A240297
Date Sampled...: 01/23/02 12:24 Date Received..: 01/24/02 11:20
Matrix.....: SOLID

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E2A240236-001 Prep Batch #...: 2025243									
Mercury									
	ND	0.167	0.176	mg/kg	105		SW846 7471A	01/29-01/30/02	ER6QF1DF
	ND	0.167	0.185	mg/kg	111	5.0	SW846 7471A	01/29-01/30/02	ER6QF1DG

Dilution Factor: 1
Analysis Time..: 17:41 Instrument ID..: M04 Analyst ID.....: 000023
MS Run #.....: 2031105

NOTE(S):

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

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2A240297
Date Sampled...: 01/16/02 11:45 Date Received..: 01/24/02 19:30
Matrix.....: SOLID

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E2A240297-001 Prep Batch #...: 2025334									
Aluminum									
	24100	200	24300 N	mg/kg			SW846 6010B	01/26-01/27/02	ER7C41A3
	24100	200	26000 N	mg/kg			SW846 6010B	01/26-01/27/02	ER7C41A4
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Arsenic									
	7.5	200	197	mg/kg	95		SW846 6010B	01/26-01/27/02	ER7C41A5
	7.5	200	199	mg/kg	96	1.2	SW846 6010B	01/26-01/27/02	ER7C41A6
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Antimony									
	ND	50.0	18.0 N	mg/kg	36		SW846 6010B	01/26-01/27/02	ER7C41A7
	ND	50.0	18.2 N	mg/kg	36	1.0	SW846 6010B	01/26-01/27/02	ER7C41A8
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Barium									
	184	200	358	mg/kg	87		SW846 6010B	01/26-01/27/02	ER7C41A9
	184	200	376	mg/kg	96	5.0	SW846 6010B	01/26-01/27/02	ER7C41CA
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Cadmium									
	1.3	5.00	4.71 N	mg/kg	69		SW846 6010B	01/26-01/27/02	ER7C41CC
	1.3	5.00	4.64 N	mg/kg	67	1.5	SW846 6010B	01/26-01/27/02	ER7C41CD
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Chromium									
	33.6	20.0	51.5	mg/kg	89		SW846 6010B	01/26-01/27/02	ER7C41CE
	33.6	20.0	55.5	mg/kg	109	7.4	SW846 6010B	01/26-01/27/02	ER7C41CF
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2A240297 Matrix.....: SOLID
Date Sampled...: 01/16/02 11:45 Date Received..: 01/24/02 19:30

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Beryllium									
	0.76	5.00	5.65	mg/kg	98		SW846 6010B	01/26-01/27/02	ER7C41CG
	0.76	5.00	5.78	mg/kg	100	2.3	SW846 6010B	01/26-01/27/02	ER7C41CH
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Lead									
	6.7	50.0	52.5	mg/kg	92		SW846 6010B	01/26-01/27/02	ER7C41CJ
	6.7	50.0	53.3	mg/kg	93	1.6	SW846 6010B	01/26-01/27/02	ER7C41CK
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Selenium									
	ND	200	188	mg/kg	94		SW846 6010B	01/26-01/27/02	ER7C41CL
	ND	200	190	mg/kg	95	0.69	SW846 6010B	01/26-01/27/02	ER7C41CM
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Silver									
	ND	5.00	4.73	mg/kg	95		SW846 6010B	01/26-01/27/02	ER7C41CN
	ND	5.00	4.77	mg/kg	95	0.77	SW846 6010B	01/26-01/27/02	ER7C41CP
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Cobalt									
	11.7	50.0	57.6	mg/kg	92		SW846 6010B	01/26-01/27/02	ER7C41CQ
	11.7	50.0	59.0	mg/kg	95	2.4	SW846 6010B	01/26-01/27/02	ER7C41CR
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Copper									
	31.1	25.0	53.8	mg/kg	91		SW846 6010B	01/26-01/27/02	ER7C41CT
	31.1	25.0	56.8	mg/kg	103	5.5	SW846 6010B	01/26-01/27/02	ER7C41CU
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2A240297 Matrix.....: SOLID
Date Sampled...: 01/16/02 11:45 Date Received..: 01/24/02 19:30

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Molybdenum									
	1.5	100	92.9	mg/kg	91		SW846 6010B	01/26-01/27/02	ER7C41CV
	1.5	100	93.9	mg/kg	92	1.1	SW846 6010B	01/26-01/27/02	ER7C41CW
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Nickel									
	22.1	50.0	67.9	mg/kg	92		SW846 6010B	01/26-01/27/02	ER7C41CX
	22.1	50.0	70.5	mg/kg	97	3.8	SW846 6010B	01/26-01/27/02	ER7C41C0
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Thallium									
	2.0	200	182	mg/kg	90		SW846 6010B	01/26-01/27/02	ER7C41C1
	2.0	200	183	mg/kg	91	0.46	SW846 6010B	01/26-01/27/02	ER7C41C2
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Vanadium									
	64.8	50.0	111	mg/kg	92		SW846 6010B	01/26-01/27/02	ER7C41C3
	64.8	50.0	116	mg/kg	102	4.4	SW846 6010B	01/26-01/27/02	ER7C41C4
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						
Zinc									
	85.2	50.0	128	mg/kg	85		SW846 6010B	01/26-01/27/02	ER7C41C5
	85.2	50.0	136	mg/kg	102	6.4	SW846 6010B	01/26-01/27/02	ER7C41C6
			Dilution Factor: 1						
			Analysis Time..: 04:39		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2025157						

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 Volatiles

Client Lot #...:	E2A240297	Work Order #...:	ER7C51A3-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A240297-002		ER7C51A4-MSD		
Date Sampled...:	01/21/02 13:00	Date Received..:	01/24/02 19:30	MS Run #.....:	2028207
Prep Date.....:	01/26/02	Analysis Date..:	01/26/02		
Prep Batch #...:	2028371	Analysis Time..:	04:18		
Dilution Factor:	1	Analyst ID.....:	001464	Instrument ID..:	G13

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
TPH (as Gasoline)	ND	5.00	6.51	mg/kg	130		SW846 8015B
	ND	5.00	5.97	mg/kg	119	8.6	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	107	(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

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...:	E2A240297	Work Order #...:	ER7C51A5-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A240297-002		ER7C51A6-MSD		
Date Sampled...:	01/21/02 13:00	Date Received..:	01/24/02 19:30	MS Run #.....:	2030185
Prep Date.....:	01/25/02	Analysis Date..:	01/28/02		
Prep Batch #...:	2030344	Analysis Time..:	23:50		
Dilution Factor:	1	Analyst ID.....:	999998	Instrument ID..:	MSG

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Benzene	ND	2500	1660	ug/kg	66		SW846 8260B
	ND	2500	1630	ug/kg	65	1.6	SW846 8260B
Chlorobenzene	ND	2500	1940	ug/kg	78		SW846 8260B
	ND	2500	1860	ug/kg	75	4.0	SW846 8260B
1,1-Dichloroethene	ND	2500	1580	ug/kg	63		SW846 8260B
	ND	2500	1530	ug/kg	61	3.2	SW846 8260B
Toluene	ND	2500	1940	ug/kg	78		SW846 8260B
	ND	2500	1870	ug/kg	75	3.8	SW846 8260B
Trichloroethene	ND	2500	1820	ug/kg	73		SW846 8260B
	ND	2500	1770	ug/kg	71	2.8	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	79	(60 - 140)
	75	(60 - 140)
1,2-Dichloroethane-d4	73	(60 - 140)
	70	(60 - 140)
Toluene-d8	84	(60 - 140)
	80	(60 - 140)

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 #...:	E2A240297	Work Order #...:	ER5DM1AD-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A230278-009		ER5DM1AE-MSD		
Date Sampled...:	01/23/02 09:20	Date Received..:	01/23/02 18:30	MS Run #.....:	2025102
Prep Date.....:	01/25/02	Analysis Date..:	01/26/02		
Prep Batch #...:	2025274	Analysis Time..:	23:10		
Dilution Factor:	1	Analyst ID.....:	018568	Instrument ID..:	G01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	84	(55 - 130)			SW846 8015B
	83	(55 - 130)	1.6	(0-35)	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	92	(60 - 130)
	90	(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 #...: E2A240297 Matrix.....: SOLID
Date Sampled...: 01/23/02 12:24 Date Received..: 01/24/02 11:20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E2A240236-001 Prep Batch #...: 2025243							
Mercury	105	(80 - 120)			SW846 7471A	01/29-01/30/02	ER6QF1DF
	111	(80 - 120)	5.0	(0-20)	SW846 7471A	01/29-01/30/02	ER6QF1DG

Dilution Factor: 1
Analysis Time..: 17:41 Instrument ID..: M04 Analyst ID.....: 000023
MS Run #.....: 2031105

NOTE(S):

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2A240297 Matrix.....: SOLID
Date Sampled...: 01/16/02 11:45 Date Received..: 01/24/02 19:30

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E2A240297-001 Prep Batch #...: 2025334							
Aluminum	NC	(70 - 115)			SW846 6010B	01/26-01/27/02	ER7C41A3
	NC	(70 - 115)		(0-25)	SW846 6010B	01/26-01/27/02	ER7C41A4
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Arsenic	95	(75 - 115)			SW846 6010B	01/26-01/27/02	ER7C41A5
	96	(75 - 115)	1.2	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41A6
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Antimony	36 N	(75 - 115)			SW846 6010B	01/26-01/27/02	ER7C41A7
	36 N	(75 - 115)	1.0	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41A8
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Barium	87	(80 - 120)			SW846 6010B	01/26-01/27/02	ER7C41A9
	96	(80 - 120)	5.0	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41CA
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Cadmium	69 N	(80 - 120)			SW846 6010B	01/26-01/27/02	ER7C41CC
	67 N	(80 - 120)	1.5	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41CD
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Chromium	89	(85 - 120)			SW846 6010B	01/26-01/27/02	ER7C41CE
	109	(85 - 120)	7.4	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41CF
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Beryllium	98	(80 - 120)			SW846 6010B	01/26-01/27/02	ER7C41CG
	100	(80 - 120)	2.3	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41CH
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2A240297 Matrix.....: SOLID
Date Sampled...: 01/16/02 11:45 Date Received..: 01/24/02 19:30

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	92	(80 - 120)			SW846 6010B	01/26-01/27/02	ER7C41CJ
	93	(80 - 120)	1.6	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41CK
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Selenium	94	(70 - 115)			SW846 6010B	01/26-01/27/02	ER7C41CL
	95	(70 - 115)	0.69	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41CM
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Silver	95	(80 - 120)			SW846 6010B	01/26-01/27/02	ER7C41CN
	95	(80 - 120)	0.77	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41CP
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Cobalt	92	(80 - 120)			SW846 6010B	01/26-01/27/02	ER7C41CQ
	95	(80 - 120)	2.4	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41CR
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Copper	91	(80 - 120)			SW846 6010B	01/26-01/27/02	ER7C41CT
	103	(80 - 120)	5.5	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41CU
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Molybdenum	91	(80 - 120)			SW846 6010B	01/26-01/27/02	ER7C41CV
	92	(80 - 120)	1.1	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41CW
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Nickel	92	(80 - 120)			SW846 6010B	01/26-01/27/02	ER7C41CX
	97	(80 - 120)	3.8	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41C0
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2A240297 Matrix.....: SOLID
Date Sampled...: 01/16/02 11:45 Date Received..: 01/24/02 19:30

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	90	(75 - 125)			SW846 6010B	01/26-01/27/02	ER7C41C1
	91	(75 - 125)	0.46	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41C2
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Vanadium	92	(80 - 120)			SW846 6010B	01/26-01/27/02	ER7C41C3
	102	(80 - 120)	4.4	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41C4
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					
Zinc	85	(80 - 120)			SW846 6010B	01/26-01/27/02	ER7C41C5
	102	(80 - 120)	6.4	(0-25)	SW846 6010B	01/26-01/27/02	ER7C41C6
		Dilution Factor: 1					
		Analysis Time..: 04:39			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2025157					

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 Volatiles

Client Lot #...:	E2A240297	Work Order #...:	ER7C51A3-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A240297-002		ER7C51A4-MSD		
Date Sampled...:	01/21/02 13:00	Date Received..:	01/24/02 19:30	MS Run #.....:	2028207
Prep Date.....:	01/26/02	Analysis Date..:	01/26/02		
Prep Batch #...:	2028371	Analysis Time..:	04:18		
Dilution Factor:	1	Analyst ID.....:	001464	Instrument ID..:	G13

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	**130**	**(70 - 140)**			**SW846 8015B**
	119	**(70 - 140)**	**8.6**	**(0-40)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	107	(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

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	E2A240297	Work Order #...:	ER7C51A5-MS	Matrix.....:	SOLID
MS Lot-Sample #:	E2A240297-002		ER7C51A6-MSD		
Date Sampled...:	01/21/02 13:00	Date Received..:	01/24/02 19:30	MS Run #.....:	2030185
Prep Date.....:	01/25/02	Analysis Date..:	01/28/02		
Prep Batch #...:	2030344	Analysis Time..:	23:50		
Dilution Factor:	1	Analyst ID.....:	999998	Instrument ID..:	MSG

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	66	(60 - 135)			SW846 8260B
	65	(60 - 135)	1.6	(0-35)	SW846 8260B
Chlorobenzene	78	(60 - 125)			SW846 8260B
	75	(60 - 125)	4.0	(0-35)	SW846 8260B
1,1-Dichloroethene	63	(60 - 145)			SW846 8260B
	61	(60 - 145)	3.2	(0-35)	SW846 8260B
Toluene	78	(60 - 125)			SW846 8260B
	75	(60 - 125)	3.8	(0-35)	SW846 8260B
Trichloroethene	73	(60 - 140)			SW846 8260B
	71	(60 - 140)	2.8	(0-35)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	79	(60 - 140)
	75	(60 - 140)
1,2-Dichloroethane-d4	73	(60 - 140)
	70	(60 - 140)
Toluene-d8	84	(60 - 140)
	80	(60 - 140)

NOTE(S):

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

Bold print denotes control parameters

SEVERN
TRENT
SERVICES

Subcontract Reports

000071

Del Mar Analytical

2652 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

LABORATORY REPORT

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

Attention: Diane Suzuki
Project: E2A240297

Sampled: 01/16/02
Received: 01/25/02
Reported: 02/04/02

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.

CA ELAP Certificate #1169
AZ DHS License #AZ0062

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

000072

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.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

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

Client Project ID: E2A240297

Report Number: CLA0289

Sampled:01/16/02-01/23/02
Received:01/25/02

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: CLA0289-03 (RO # 10 1-VEW-21-35 - Soil)				**Sampled: 01/23/02**				
Acenaphthene	EPA 8310	C2A3001	50	ND	1	1/30/2002	2/1/2002	
Acenaphthylene	EPA 8310	C2A3001	200	ND	1	1/30/2002	2/1/2002	L
Anthracene	EPA 8310	C2A3001	2.0	ND	1	1/30/2002	2/1/2002	
Benzo(a)anthracene	EPA 8310	C2A3001	2.0	ND	1	1/30/2002	2/1/2002	
Benzo(a)pyrene	EPA 8310	C2A3001	2.0	ND	1	1/30/2002	2/1/2002	
Benzo(b)fluoranthene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Benzo(g,h,i)perylene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Benzo(k)fluoranthene	EPA 8310	C2A3001	2.0	ND	1	1/30/2002	2/1/2002	
Chrysene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Dibenzo(a,h)anthracene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Fluoranthene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Fluorene	EPA 8310	C2A3001	5.0	**7.6**	1	1/30/2002	2/1/2002	
Indeno(1,2,3-cd)pyrene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Naphthalene	EPA 8310	C2A3001	40	ND	1	1/30/2002	2/1/2002	
Phenanthrene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Pyrene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	C
Surrogate: 2-Methylanthracene (35-115%)				*82 %*				

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

000073

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.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

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

Client Project ID: E2A240297

Report Number: CLA0289

Sampled:01/16/02-01/23/02
Received:01/25/02

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: CLA0289-01 (RO # 7 1-VEW-6-45 - Soil)				**Sampled: 01/16/02**				
Acenaphthene	EPA 8310	C2A2903	50	ND	1	1/29/2002	1/31/2002	
Acenaphthylene	EPA 8310	C2A2903	200	ND	1	1/29/2002	1/31/2002	L
Anthracene	EPA 8310	C2A2903	2.0	ND	1	1/29/2002	1/31/2002	
Benzo(a)anthracene	EPA 8310	C2A2903	2.0	ND	1	1/29/2002	1/31/2002	
Benzo(a)pyrene	EPA 8310	C2A2903	2.0	ND	1	1/29/2002	1/31/2002	
Benzo(b)fluoranthene	EPA 8310	C2A2903	5.0	ND	1	1/29/2002	1/31/2002	
Benzo(g,h,i)perylene	EPA 8310	C2A2903	5.0	ND	1	1/29/2002	1/31/2002	
Benzo(k)fluoranthene	EPA 8310	C2A2903	2.0	ND	1	1/29/2002	1/31/2002	
Chrysene	EPA 8310	C2A2903	5.0	ND	1	1/29/2002	1/31/2002	
Dibenzo(a,h)anthracene	EPA 8310	C2A2903	5.0	ND	1	1/29/2002	1/31/2002	
Fluoranthene	EPA 8310	C2A2903	5.0	ND	1	1/29/2002	1/31/2002	
Fluorene	EPA 8310	C2A2903	5.0	**5.4**	1	1/29/2002	1/31/2002	
Indeno(1,2,3-cd)pyrene	EPA 8310	C2A2903	5.0	ND	1	1/29/2002	1/31/2002	
Naphthalene	EPA 8310	C2A2903	40	ND	1	1/29/2002	1/31/2002	
Phenanthrene	EPA 8310	C2A2903	5.0	ND	1	1/29/2002	1/31/2002	
Pyrene	EPA 8310	C2A2903	5.0	ND	1	1/29/2002	1/31/2002	
Surrogate: 2-Methylanthracene (35-115%)				*84 %*				
Sample ID: CLA0289-02 (RO # 9 1-VEW-7-69 - Soil)				**Sampled: 01/21/02**				
Acenaphthene	EPA 8310	C2A3001	50	ND	1	1/30/2002	2/1/2002	
Acenaphthylene	EPA 8310	C2A3001	200	ND	1	1/30/2002	2/1/2002	L
Anthracene	EPA 8310	C2A3001	2.0	ND	1	1/30/2002	2/1/2002	
Benzo(a)anthracene	EPA 8310	C2A3001	2.0	ND	1	1/30/2002	2/1/2002	
Benzo(a)pyrene	EPA 8310	C2A3001	2.0	ND	1	1/30/2002	2/1/2002	
Benzo(b)fluoranthene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Benzo(g,h,i)perylene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Benzo(k)fluoranthene	EPA 8310	C2A3001	2.0	ND	1	1/30/2002	2/1/2002	
Chrysene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Dibenzo(a,h)anthracene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Fluoranthene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Fluorene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Indeno(1,2,3-cd)pyrene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Naphthalene	EPA 8310	C2A3001	40	ND	1	1/30/2002	2/1/2002	
Phenanthrene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	
Pyrene	EPA 8310	C2A3001	5.0	ND	1	1/30/2002	2/1/2002	C
Surrogate: 2-Methylanthracene (35-115%)				*73 %*				

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

000074

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.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

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

Client Project ID: E2A240297

Report Number: CLA0289

Sampled:01/16/02-01/23/02
Received:01/25/02

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: C2A2903 Extracted: 01/29/02										
Blank Analyzed: 01/30/02 (C2A2903-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	*5.08*		*ug/kg*	*8.00*		*64*	*35-115*			
LCS Analyzed: 01/30/02 (C2A2903-BS1)										**M-NR**
Acenaphthene	120	50	ug/kg	160		75	45-115			
Acenaphthylene	470	200	ug/kg	320		147	50-115			*L*
Anthracene	11.5	2.0	ug/kg	16.0		72	55-115			
Benzo(a)anthracene	13.7	2.0	ug/kg	16.0		86	65-115			
Benzo(a)pyrene	10.2	2.0	ug/kg	16.0		64	55-115			
Benzo(b)fluoranthene	27.0	5.0	ug/kg	32.0		84	65-115			
Benzo(g,h,i)perylene	26.3	5.0	ug/kg	32.0		82	60-115			
Benzo(k)fluoranthene	13.2	2.0	ug/kg	16.0		82	65-115			
Chrysene	13.4	5.0	ug/kg	16.0		84	65-115			
Dibenzo(a,h)anthracene	27.5	5.0	ug/kg	32.0		86	60-115			
Fluoranthene	28.0	5.0	ug/kg	32.0		88	65-115			
Fluorene	26.4	5.0	ug/kg	32.0		82	55-115			
Indeno(1,2,3-cd)pyrene	14.2	5.0	ug/kg	16.0		89	55-115			
Naphthalene	167	40	ug/kg	160		104	45-115			
Phenanthrene	17.1	5.0	ug/kg	16.0		107	55-120			
Pyrene	14.9	5.0	ug/kg	16.0		93	55-115			

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

000075

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.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

STL Los Angeles 1721 S. Grand Avenue Santa Ana, CA 92705 Attention: Diane Suzuki	Client Project ID: E2A240297 Report Number: CLA0289	Sampled:01/16/02-01/23/02 Received:01/25/02

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: C2A2903 Extracted: 01/29/02										
LCS Analyzed: 01/30/02 (C2A2903-BS1)										M-NR
Surrogate: 2-Methylanthracene	*5.66*		*ug/kg*	*8.00*		*71*	*35-115*			
Batch: C2A3001 Extracted: 01/30/02										
Blank Analyzed: 01/31/02 (C2A3001-BLK1)										
Acenaphthene	ND	50	ug/kg							
Acenaphthylene	ND	200	ug/kg							*L*
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							*C*
Surrogate: 2-Methylanthracene	*6.08*		*ug/kg*	*8.00*		*76*	*35-115*			
LCS Analyzed: 01/31/02 (C2A3001-BS1)										
Acenaphthene	124	50	ug/kg	160		78	45-115			
Acenaphthylene	382	200	ug/kg	320		119	50-115			*L*
Anthracene	12.0	2.0	ug/kg	16.0		75	55-115			
Benzo(a)anthracene	13.4	2.0	ug/kg	16.0		84	65-115			
Benzo(a)pyrene	11.8	2.0	ug/kg	16.0		74	55-115			
Benzo(b)fluoranthene	26.8	5.0	ug/kg	32.0		84	65-115			
Benzo(g,h,i)perylene	25.7	5.0	ug/kg	32.0		80	60-115			
Benzo(k)fluoranthene	13.1	2.0	ug/kg	16.0		82	65-115			
Chrysene	12.7	5.0	ug/kg	16.0		79	65-115			
Dibenzo(a,h)anthracene	26.7	5.0	ug/kg	32.0		83	60-115			
Fluoranthene	25.7	5.0	ug/kg	32.0		80	65-115			

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.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

STL Los Angeles 1721 S. Grand Avenue Santa Ana, CA 92705 Attention: Diane Suzuki	Client Project ID: E2A240297 Report Number: CLA0289	Sampled:01/16/02-01/23/02 Received:01/25/02

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: C2A3001 Extracted: 01/30/02										
LCS Analyzed: 01/31/02 (C2A3001-BS1)										
Fluorene	26.0	5.0	ug/kg	32.0		81	55-115			
Indeno(1,2,3-cd)pyrene	14.0	5.0	ug/kg	16.0		88	55-115			
Naphthalene	145	40	ug/kg	160		91	45-115			
Phenanthrene	13.2	5.0	ug/kg	16.0		82	55-120			
Pyrene	12.1	5.0	ug/kg	16.0		76	55-115			
Surrogate: 2-Methylanthracene	*6.34*		*ug/kg*	*8.00*		*79*	*35-115*			
Matrix Spike Analyzed: 02/02/02 (C2A3001-MS1)					**Source: CLA0306-04**					
Acenaphthene	119	50	ug/kg	160	ND	55	5-155			
Acenaphthylene	294	200	ug/kg	320	ND	73	35-130			*L*
Anthracene	11.5	2.0	ug/kg	16.0	ND	72	40-115			
Benzo(a)anthracene	12.0	2.0	ug/kg	16.0	ND	75	45-130			
Benzo(a)pyrene	12.2	2.0	ug/kg	16.0	ND	76	50-115			
Benzo(b)fluoranthene	24.4	5.0	ug/kg	32.0	ND	76	40-130			
Benzo(g,h,i)perylene	20.4	5.0	ug/kg	32.0	ND	64	45-115			
Benzo(k)fluoranthene	12.0	2.0	ug/kg	16.0	ND	75	40-125			
Chrysene	10.6	5.0	ug/kg	16.0	ND	64	45-125			
Dibenzo(a,h)anthracene	22.3	5.0	ug/kg	32.0	ND	61	25-130			
Fluoranthene	27.2	5.0	ug/kg	32.0	ND	85	50-135			
Fluorene	22.4	5.0	ug/kg	32.0	ND	67	35-120			
Indeno(1,2,3-cd)pyrene	14.2	5.0	ug/kg	16.0	ND	71	40-120			
Naphthalene	123	40	ug/kg	160	ND	62	30-115			
Phenanthrene	15.3	5.0	ug/kg	16.0	ND	96	30-160			
Pyrene	15.1	5.0	ug/kg	16.0	13	13	20-165			*M2*
Surrogate: 2-Methylanthracene	*6.12*		*ug/kg*	*8.00*		*76*	*25-135*			
Matrix Spike Dup Analyzed: 02/02/02 (C2A3001-MSD1)					**Source: CLA0306-04**					
Acenaphthene	144	50	ug/kg	160	ND	71	5-155	19	25	
Acenaphthylene	344	200	ug/kg	320	ND	89	35-130	16	25	*L*
Anthracene	11.7	2.0	ug/kg	16.0	ND	73	40-115	2	25	
Benzo(a)anthracene	11.6	2.0	ug/kg	16.0	ND	72	45-130	3	20	
Benzo(a)pyrene	12.1	2.0	ug/kg	16.0	ND	76	50-115	0.8	20	
Benzo(b)fluoranthene	23.2	5.0	ug/kg	32.0	ND	72	40-130	5	25	
Benzo(g,h,i)perylene	18.9	5.0	ug/kg	32.0	ND	59	45-115	8	20	
Benzo(k)fluoranthene	11.6	2.0	ug/kg	16.0	ND	72	40-125	3	25	

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.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

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

Client Project ID: E2A240297

Report Number: CLA0289

Sampled:01/16/02-01/23/02
Received:01/25/02

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: C2A3001 Extracted: 01/30/02										
Matrix Spike Dup Analyzed: 02/02/02 (C2A3001-MSD1)					**Source: CLA0306-04**					
Chrysene	11.1	5.0	ug/kg	16.0	ND	67	45-125	5	30	
Dibenzo(a,h)anthracene	17.2	5.0	ug/kg	32.0	ND	45	25-130	26	30	
Fluoranthene	26.9	5.0	ug/kg	32.0	ND	84	50-135	1	25	
Fluorene	25.1	5.0	ug/kg	32.0	ND	76	35-120	11	20	
Indeno(1,2,3-cd)pyrene	14.3	5.0	ug/kg	16.0	ND	71	40-120	0.7	20	
Naphthalene	139	40	ug/kg	160	ND	72	30-115	12	25	
Phenanthrene	15.2	5.0	ug/kg	16.0	ND	95	30-160	0.7	30	
Pyrene	14.9	5.0	ug/kg	16.0	13	12	20-165	1	20	*M2*
Surrogate: 2-Methylanthracene	*6.15*		*ug/kg*	*8.00*		*77*	*25-135*			

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.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

STL Los Angeles 1721 S. Grand Avenue Santa Ana, CA 92705 Attention: Diane Suzuki	Client Project ID: E2A240297 Report Number: CLA0289	Sampled:01/16/02-01/23/02 Received:01/25/02

DATA QUALIFIERS AND DEFINITIONS

C	Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
L	Laboratory Control Sample recovery was above the method control limits. Analyte not detected, data not impacted.
M-NR	No results were reported for the MS/MSD. The sample used for the MS/MSD required dilution due to the sample matrix. Because of this, the spike compounds were diluted below the detection limit.
M2	The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
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

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.

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: STL LA	Project Manager: DIANE SUZUKI	Date: 01/24/02	Chain of Custody Number: 050192
Address: 1721 S GRAND AVE	Telephone Number (Area Code)/Fax Number: (714) 258-8610 EXT 309	Lab Number: E2A240297	Page 1 of 1
City: SANTA ANA; State: CA; Zip Code: 92705	Site Contact:	Lab Contact: D SUZUKI	
Project Name and Location (State): BRC-LB	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): 8310 PAH	Special Instructions/ Conditions of Receipt
RO#7 1-VEW-6-45	1/14/02	1145				X	X						X	
RO#9 1-VEW-7-69	1/21/02	1300				X	X						X	
RO#10 1-VEW-21-35	1/23/02	840				X	X						X	

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] 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 [X] 7 Days [ ] 14 Days [ ] 21 Days [ ] Other ____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Matt Crawfield	1-25-02	9:20	1. Received By: [signature]	1/25/02	0920
2. Relinquished By: [signature]	1/25/02	12:00	2. Received By: [signature]	1-25-02	12:00
3. Relinquished By: Lorna Archello 1-25-02		3:00	3. Received By: [signature]	1/25/02	1500

Comments:

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

2

BOE-C6-0181275

Appendix B

BOE-C6-0181276

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 [2,4]	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
75-34-3	1,1 - Dichloroethane (1,1-DCA)	5.00E-03	5.3E+01	5.19E-04	–	2.3E-01	2.53E-01	2.07E-01	1.44E+00	16	1.18E-03	3.89E-01
75-35-4	1,1-Dichloroethene	6.00E-03	6.5E+01	5.19E-04	–	1.1E+00	2.53E-01	2.07E-01	1.44E+00	16	2.20E-03	7.26E-01
156-59-2	cis-1,2-Dichloroethylene (cis 1,2-DCE)	6.00E-03	3.6E+01	5.19E-04	–	1.7E-01	2.53E-01	2.07E-01	1.44E+00	16	1.31E-03	4.32E-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	16	4.30E-02	1.42E+01
79-01-6	Trichloroethylene	5.00E-03	9.4E+01	5.19E-04	–	4.2E-01	2.53E-01	2.07E-01	1.44E+00	16	1.42E-03	4.69E-01

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_T 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_T = 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, 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-C6-0181278

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 Average (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 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

BOE-C6-0181279

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 Average (depths 12 to 65 feet bgs)	0.30	0.57	0.13

The weighted average 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.

BOE-C6-0181280