September 12, 2011

Brad Davis
Zia Engineering & Environmental
755 S Telshor Blvd Ste F-201
Las Cruces, NM 88011

Order No: 1108430

TEL: (575) 678-3397
FAX: (575) 532-1587

RE: HELSTF Chromium Spill

Dear Brad Davis:

DHL Analytical received 4 sample(s) on 8/31/2011 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of DoD QSM Ver 4.2 and NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. This report shall not be reproduced except in full without the written approval of DHL Analytical, Inc. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas & DoD Laboratory Certification Number: T104704211-11-7 & DoD ELAP #ADE-1416 v2

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DHL ANALYTICAL
2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com

№ 51628

CHAIN-OF-CUSTODY

CLIENT: ETA ENGINEERING
ADDRESS: 755 S. TELSHOR BLVD. SUITE Q201 88011
PHONE: (575) 552-1526 FAX/E-MAIL:
DATA REPORTED TO:
ADDITIONAL REPORT COPIES TO:

DATE: PAGE 1 OF 1
PO #: DHL WORK ORDER #: 1108433
PROJECT LOCATION OR NAME:
CLENT PROJECT #: COLLECTOR:

Authorize 5% surcharge for TRRP Report? ☐ Yes ☐ No

S=SOIL P=PAINT W=WATER SL=SLUDGE A=AIR O=OTHER L=LIQUID SO=SOLID

PRESERVATION: HCl, HNO_3, H_2SO_4 ☐ NaOH ☐, ICE, UNPRESERVED

ANALYSES: BTEX ☐ MTBE ☐ (METHOD 8021) | TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐ | GRO (METHOD 8015) ☐ DRO (METHOD 8105) ☐ | VOC 8260 ☐ SVOC 624 ☐ VOC 8260/5035 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLD PAH ☐ SVOC 625 ☐ | 8081 PEST ☐ 608 PEST/PCB ☐ 8270 PEST ☐ | 8270 O-P PEST ☐ 8082 PCB ☐ 8270 PCB ☐ | 8321 HERB ☐ 8330 EXPL ☐ PERCHLORATE ☐ | METALS 6020 ☐ METALS 200.8 ☐ DISS. METALS ☐ | RCRA ☐ TX11 ☐ ☐ | PH ☐ HEX CHROM ☐ ALKALINITY ☐ | CHLORIDE ☐ ANIONS ☐ | TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐ | TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐ | RCI ☐ TOX ☐ FLASHPOINT ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | °C 5.3 to 6

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	BTEX	TPH 1005	GRO (METHOD 8015)	VOC 8260	SVOC 8270	8081 PEST	8270 O-P PEST	8321 HERB	METALS 6020	RCRA	PH	CHLORIDE	TCLP-SVOC	TCLP-METALS	RCI	TDS	°C	FIELD NOTES
HCSF-0143-HMW-011-0811	01	8-30-11	1100	W		10								X	X				X		X						X		
HCSF-0143-HMW-008-0811	02	8-30-11	1207	W		10								X	X				X		X						X		
HCSF-0143-HMW-148-0811	03	8-30-11	1207	W		10								X	X				X		X						X		
HCSF-0143-TB3-0811	04	8-30-11	1207	W		2									X														
~~HCSF-0154-DMW-016-0811~~	~~05~~	~~8-30-11~~	~~1223~~	~~W~~		~~10~~								~~X~~	~~X~~				~~X~~		~~X~~						~~X~~		~~Per Brad DB 8/31/11~~
TOTAL																													

RELINQUISHED BY: (Signature) DATE/TIME 8-30-11 1430 RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME 8/31/11 833 RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

☐ DHL DISPOSAL @ $5.00 each ☐ Return

TURN AROUND TIME
RUSH ☐ CALL FIRST
1 DAY ☐ CALL FIRST
2 DAY ☐
NORMAL ☐
OTHER ☐ _____

LABORATORY USE ONLY:
RECEIVING TEMP: 4.1 THERM #: 37
CUSTODY SEALS: ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #:
☐ APC DELIVERY
☐ HAND DELIVERED

AB

1A

1B

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Lone Star Overnight

WWW.LSO.COM
Questions? Call 800-800-8984

Airbill No. 47326666

47326666

1. To: Print Name (Person): JENNIFER BARKER Phone (Important): (512) 388-8222

Company Name: DHL ANALYTICAL

Street Address (No P.O. Box or P.O. Box Zip Code® Deliveries): 2300 DOUBLE CREEK DR.

Suite / Floor:

City: ROUND ROCK State: TX Zip: 78664

2. From: Print Name (Person): GABRIEL GALLO Phone (Important): 575-532-1526

Company Name: ZIA ENGINEERING

Street Address: 755 S. TESLHOR BLVD.

Suite / Floor: STE. Q-201

City: LAS CRUCES State: NM Zip: 88011

3. Service: Visit www.lso.com for availability of services to your destination and enjoy added features by creating your shipping label online.

- [x] By 10:30 am Delivery — Check availability at www.lso.com
- [ ] By 8:30 am Delivery (Extra charge, no signature obtained) — Check availability at www.lso.com
- [ ] By 3:00 pm Delivery
- [ ] Ground (next day to most cities)
- [ ] Saturday Delivery (Extra charge, not available on Ground) — Check availability at www.lso.com
- [ ] Other _____

Assumed 10:30 a.m. service unless otherwise noted.

- [x] Deliver Without Delivery Signature (See Limits of Liability below)

Release Signature

X L 24 x W 12 x H 12

4. Package: Weight: X 50

Your Company's Billing Reference Information: LCS-09-015-B0029

Ship Date: (mm/dd/yy) X8 / 30 / 11

5. Payment: PUS

FOR COURIER USE ONLY

Courier Number: 2442

[ ] Check here if LSO Supplies are used with Ground Service.

Pick-up Location: 6014

Date: 08-30

Time: 1805

City Code:

LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. Additional limitations of liability are contained in our current Service Guide. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. NO DELIVERY SIGNATURE WILL BE OBTAINED FOR 08:30 AM DELIVERIES AND RESIDENTIAL DELIVERIES. PRIORITY SERVICE PACKAGING PROVIDED BY LSO IS NOT INTENDED FOR USE ON GROUND SERVICE. OVERSIZE RATES MAY APPLY. DELIVERY COMMITMENTS MAY VARY. ADDITIONAL FEES MAY APPLY.

CUSTODY SEAL
DATE 8-30-11
SIGNATURE

QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900

DHL Analytical

Sample Receipt Checklist

Client Name **Zia Engineering & Environmental** Date Received: **8/31/2011**

Work Order Number **1108430** Received by **JB**

Checklist completed by: Signature [signature] Date 8/31/11 Reviewed by Initials [initials] Date 8-31-11

Carrier name: LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	**4.1** °C
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Adjusted? N Checked by [initials]

Any No response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Page 1 of 1

Laboratory Data Package Signature Page

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC 5.13
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- R10 Other problems or anomalies.

The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Scott Schroeder – Project Manager
John DuPont – General / QA Manager

Signature

09/12/11
Date

DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: HELSTF Chromium Spill	Date: 9/12/11
Reviewer Name: Carlos Castro	Laboratory Work Order: 1108430
Prep Batch Number(s): See Prep Dates Report	Run Batch: See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-Custody (C-O-C)					
R1	OI	1) Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				R1-01
		2) Were all departures from standard conditions described in an exception report?			X		
R2	OI	**Sample and Quality Control (QC) Identification**					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test Reports**					
		1) Were all samples prepared and analyzed within holding times?	X				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		3) Were calculations checked by a peer or supervisor?	X				
		4) Were all analyte identifications checked by a peer or supervisor?	X				
		5) Were sample quantitation limits reported for all analytes not detected?	X				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			X		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			X		
		8) If required for the project, TICs reported?			X		
R4	O	**Surrogate Recovery Data**					
		1) Were surrogates added prior to extraction?	X				
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	**Test Reports/Summary Forms for Blank Samples**					
		1) Were appropriate type(s) of blanks analyzed?	X				
		2) Were blanks analyzed at the appropriate frequency?	X				
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		4) Were blank concentrations < MQL?	X				
R6	OI	**Laboratory Control Samples (LCS):**					
		1) Were all COCs included in the LCS?	X				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		3) Were LCSs analyzed at the required frequency?	X				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			R6-04
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		6) Was the LCSD RPD within QC limits (if applicable)?	X				
R7	OI	**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data**					
		1) Were the project/method specified analytes included in the MS and MSD?	X				
		2) Were MS/MSD analyzed at the appropriate frequency?	X				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R7-03
		4) Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical Duplicate Data**					
		1) Were appropriate analytical duplicates analyzed for each matrix?	X				
		2) Were analytical duplicates analyzed at the appropriate frequency?	X				
		3) Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method Quantitation Limits (MQLs):**					
		1) Are the MQLs for each method analyte included in the laboratory data package?	X				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		3) Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	**Other Problems/Anomalies**					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				R10-01
		2) Were all necessary corrective actions performed for the reported data?	X				
		3) Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

DHL Analytical, Inc.

Laboratory Review Checklist (continued): Supporting Data

Project Name: HELSTF Chromium Spill	Date: 9/12/11
Reviewer Name: Carlos Castro	Laboratory Work Order: 1108430

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Was the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICAL data available for all instruments used?	X				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB):**					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences for each analyte within the method-required QC limits?		X			S2-02
		3) Was the ICAL curve verified for each analyte?	X				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass Spectral Tuning:**					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal Standards (IS):**					
		1) Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw Data (NELAC section 1 appendix A glossary, and section 5.12)**					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		2) Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual Column Confirmation**					
		1) Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively Identified Compounds (TICs):**					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) Results:**					
		1) Were percent recoveries within method QC limits?	X				
S9	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method Detection Limit (MDL) Studies**					
		1) Was a MDL study performed for each reported analyte?	X				
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency Test Reports:**					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards Documentation**					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/Analyte Identification Procedures**					
		1) Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of Analyst Competency (DOC)**					
		1) Was DOC conducted consistent with NELAC Chapter 5C?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/Validation Documentation for Methods** (NELAC Chap 5)					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory Standard Operating Procedures (SOPs):**					
		1) Are laboratory SOPs current and on file for each method performed?	X				

p

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Lab Order: 1108430

CASE NARRATIVE

This case narrative describes abnormalities and deviations that may affect the results and summarizes all known issues that need to be highlighted for the data user to assess the results. This case narrative and the report contents are compliant with DoD QSM Ver 4.2 and NELAC.

Samples were analyzed using the methods outlined in the following references:

Method SW8260C - Volatile Organics
Method SW6020 - Metals Analysis
Method M4500-H+ B (18th Edition) - pH of a Water
Method M3500-Cr D (18th Edition) - Hexavalent Chromium
Method M5310C (18th Edition) - TOC Analysis
Method M8015D - DRO Analysis

Exception Report R1-01

Samples were received on and log-in performed on 8/31/11. A total of 4 samples were received and all were analyzed. The samples arrived in good condition and were properly packaged.

Exception Report R6-04

For Volatiles analysis performed on 9/2/11 the LCS recovery was slightly above control limits for Chloromethane. This is flagged accordingly in the QC summary report. All samples were below detection limits for this compound. No further corrective actions were taken.

Exception Report R7-03

For Volatiles analysis performed on 9/2/11 the matrix spike and matrix spike duplicate recoveries were out of control limits for a few compounds. These are flagged accordingly in the QC summary report. The reference sample selected for the matrix spike and matrix spike duplicate was not from this work order. All samples were below detection limits for these compounds. No further corrective actions were taken.

Exception Report R10-01

For Metals analysis the Hexavalent Chromium result was slightly higher than the Total Chromium result for sample HLSF-0143-HMW-011-0811. This is within the acceptable variation limits. No further corrective actions were taken.

For DRO analysis an MS/MSD was not performed due to insufficient sample volume. An LCS/LCSD was performed instead.

Exception Report S2-02

For Volatiles analysis performed 9/2/11 the ICV was out of control limits for some compounds. These are flagged accordingly in the QC summary report. All samples were below detection limits for these compounds. No further corrective actions were taken.

A summary of project communication follows:

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Lab Order: 1108430

CASE NARRATIVE

DHL Analytical received the Project RFQ from the client on 12/29/09. Completed RFQ returned to client via email on 1/07/2010. Purchase Order/Terms and Conditions received and signed and approved by both parties on 01/25/2010.

A bottle kit (#2754) was requested and sent via Lonestar on 8/8/2011 to be received by 8/9/2011.

This sample delivery group arrived at DHL Analytical 8/31/11. Sample summary sent via email from Log-in to client on 8/31/11.

All hardcopies for the sample kit request, bill of lading for sample kit sent and login summary are kept in project folder.

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Lab Order: 1108430

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recv'd
1108430-01	HLSF-0143-HMW-011-0811		08/30/11 11:00 AM	08/31/11
1108430-02	HLSF-0143-HMW-043-0811		08/30/11 12:07 PM	08/31/11
1108430-03	HLSF-0143-HMW-143-0811		08/30/11 12:07 PM	08/31/11
1108430-04	HLSF-0143-TB3-0811		08/30/11 12:07 PM	08/31/11

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Lab Order: 1108430

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1108430-01A	HLSF-0143-HMW-011-0811	08/30/11 11:00 AM	Aqueous	SW5030C	Purge and Trap Water GC/MS	09/02/11 10:00 AM	48041
1108430-01B	HLSF-0143-HMW-011-0811	08/30/11 11:00 AM	Aqueous	M5310C	TOC prep Aqueous	09/06/11 09:00 AM	48142
1108430-01C	HLSF-0143-HMW-011-0811	08/30/11 11:00 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	09/01/11 08:47 AM	48094
1108430-01D	HLSF-0143-HMW-011-0811	08/30/11 11:00 AM	Aqueous	SW7196A	Hexachrom Prep Water	08/31/11 10:08 AM	48075
	HLSF-0143-HMW-011-0811	08/30/11 11:00 AM	Aqueous	M4500-H+ B	pH Preparation	09/01/11 11:00 AM	48100
1108430-01E	HLSF-0143-HMW-011-0811	08/30/11 11:00 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	09/01/11 01:24 PM	48102
1108430-02A	HLSF-0143-HMW-043-0811	08/30/11 12:07 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	09/02/11 10:00 AM	48041
1108430-02B	HLSF-0143-HMW-043-0811	08/30/11 12:07 PM	Aqueous	M5310C	TOC prep Aqueous	09/06/11 09:00 AM	48142
1108430-02C	HLSF-0143-HMW-043-0811	08/30/11 12:07 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	09/01/11 08:47 AM	48094
1108430-02D	HLSF-0143-HMW-043-0811	08/30/11 12:07 PM	Aqueous	SW7196A	Hexachrom Prep Water	08/31/11 10:08 AM	48075
	HLSF-0143-HMW-043-0811	08/30/11 12:07 PM	Aqueous	M4500-H+ B	pH Preparation	09/01/11 11:00 AM	48100
1108430-02E	HLSF-0143-HMW-043-0811	08/30/11 12:07 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	09/01/11 01:24 PM	48102
1108430-03A	HLSF-0143-HMW-143-0811	08/30/11 12:07 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	09/02/11 10:00 AM	48041
1108430-03B	HLSF-0143-HMW-143-0811	08/30/11 12:07 PM	Aqueous	M5310C	TOC prep Aqueous	09/06/11 09:00 AM	48142
1108430-03C	HLSF-0143-HMW-143-0811	08/30/11 12:07 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	09/01/11 08:47 AM	48094
1108430-03D	HLSF-0143-HMW-143-0811	08/30/11 12:07 PM	Aqueous	SW7196A	Hexachrom Prep Water	08/31/11 10:08 AM	48075
	HLSF-0143-HMW-143-0811	08/30/11 12:07 PM	Aqueous	M4500-H+ B	pH Preparation	09/01/11 11:00 AM	48100
1108430-03E	HLSF-0143-HMW-143-0811	08/30/11 12:07 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	09/01/11 01:24 PM	48102
1108430-04A	HLSF-0143-TB3-0811	08/30/11 12:07 PM	Trip Blank	SW5030C	Purge and Trap Water GC/MS	09/02/11 10:00 AM	48041

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Lab Order: 1108430

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1108430-01A	HLSF-0143-HMW-011-0811	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	48041	1	09/02/11 03:10 PM	GCMS5_110902A
1108430-01B	HLSF-0143-HMW-011-0811	Aqueous	M5310C	Total Organic Carbon	48142	1	09/06/11 01:54 PM	TOC_110906A
1108430-01C	HLSF-0143-HMW-011-0811	Aqueous	SW6020	Trace Metals: ICP-MS - Water	48094	1	09/01/11 11:00 PM	ICP-MS2_110901C
1108430-01D	HLSF-0143-HMW-011-0811	Aqueous	M3500-Cr D	Hexavalent Chromium-Water	48075	1	08/31/11 11:09 AM	UV/VIS_2_110831A
	HLSF-0143-HMW-011-0811	Aqueous	M4500-H+ B	pH	48100	1	09/01/11 11:07 AM	TITRATOR_110901A
1108430-01E	HLSF-0143-HMW-011-0811	Aqueous	M8015D	TPH Extractable by GC - Water	48102	1	09/02/11 10:30 AM	GC15_110902A
1108430-02A	HLSF-0143-HMW-043-0811	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	48041	1	09/02/11 03:34 PM	GCMS5_110902A
1108430-02B	HLSF-0143-HMW-043-0811	Aqueous	M5310C	Total Organic Carbon	48142	1	09/06/11 02:13 PM	TOC_110906A
1108430-02C	HLSF-0143-HMW-043-0811	Aqueous	SW6020	Trace Metals: ICP-MS - Water	48094	1	09/01/11 11:35 PM	ICP-MS2_110901C
1108430-02D	HLSF-0143-HMW-043-0811	Aqueous	M3500-Cr D	Hexavalent Chromium-Water	48075	1	08/31/11 11:09 AM	UV/VIS_2_110831A
	HLSF-0143-HMW-043-0811	Aqueous	M4500-H+ B	pH	48100	1	09/01/11 11:09 AM	TITRATOR_110901A
1108430-02E	HLSF-0143-HMW-043-0811	Aqueous	M8015D	TPH Extractable by GC - Water	48102	1	09/02/11 10:39 AM	GC15_110902A
1108430-03A	HLSF-0143-HMW-143-0811	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	48041	1	09/02/11 03:58 PM	GCMS5_110902A
1108430-03B	HLSF-0143-HMW-143-0811	Aqueous	M5310C	Total Organic Carbon	48142	1	09/06/11 02:33 PM	TOC_110906A
1108430-03C	HLSF-0143-HMW-143-0811	Aqueous	SW6020	Trace Metals: ICP-MS - Water	48094	1	09/01/11 11:41 PM	ICP-MS2_110901C
1108430-03D	HLSF-0143-HMW-143-0811	Aqueous	M3500-Cr D	Hexavalent Chromium-Water	48075	1	08/31/11 11:09 AM	UV/VIS_2_110831A
	HLSF-0143-HMW-143-0811	Aqueous	M4500-H+ B	pH	48100	1	09/01/11 11:11 AM	TITRATOR_110901A
1108430-03E	HLSF-0143-HMW-143-0811	Aqueous	M8015D	TPH Extractable by GC - Water	48102	1	09/02/11 10:48 AM	GC15_110902A
1108430-04A	HLSF-0143-TB3-0811	Trip Blank	SW8260C	8260 Water Volatiles by GC/MS	48041	1	09/02/11 04:22 PM	GCMS5_110902A

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Project No:
Lab Order: 1108430

Client Sample ID: HLSF-0143-HMW-011-0811
Lab ID: 1108430-01
Collection Date: 08/30/11 11:00 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH Extractable by GC - Water		**M8015D**					**Analyst: DO**
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	09/02/11 10:30 AM
Surr: Isopropylbenzene	50.1	0	47 - 142		%REC	1	09/02/11 10:30 AM
Surr: Octacosane	89.1	0	51 - 124		%REC	1	09/02/11 10:30 AM
Trace Metals: ICP-MS - Water		**SW6020**					**Analyst: AJR**
Chromium	0.0770	0.00200	0.00600		mg/L	1	09/01/11 11:00 PM
8260 Water Volatiles by GC/MS		**SW8260C**					**Analyst: KL**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
1,1-Dichloroethane	0.000540	0.000200	0.00100	J	mg/L	1	09/02/11 03:10 PM
1,1-Dichloroethene	0.000270	0.000200	0.00100	J	mg/L	1	09/02/11 03:10 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:10 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:10 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:10 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	09/02/11 03:10 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:10 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	09/02/11 03:10 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:10 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:10 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:10 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:10 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:10 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	09/02/11 03:10 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:10 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	J	Analyte detected between MDL and RL
B	Analyte detected in the associated Method Blank	MDL	Method Detection Limit
C	Sample Result or QC discussed in the Case Narrative	N	Parameter not NELAC certified
DF	Dilution Factor	ND	Not Detected at the Method Detection Limit
E	TPH pattern not Gas or Diesel Range Pattern	RL	Reporting Limit
		S	Spike Recovery outside control limits

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Project No:
Lab Order: 1108430

Client Sample ID: HLSF-0143-HMW-011-0811
Lab ID: 1108430-01
Collection Date: 08/30/11 11:00 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	09/02/11 03:10 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:10 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 03:10 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	09/02/11 03:10 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:10 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:10 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 03:10 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 03:10 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Trichloroethene	0.0163	0.000600	0.00200		mg/L	1	09/02/11 03:10 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:10 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	09/02/11 03:10 PM
Surr: 1,2-Dichloroethane-d4	89.2	0	70 - 120		%REC	1	09/02/11 03:10 PM
Surr: 4-Bromofluorobenzene	102	0	75 - 120		%REC	1	09/02/11 03:10 PM
Surr: Dibromofluoromethane	94.0	0	85 - 115		%REC	1	09/02/11 03:10 PM
Surr: Toluene-d8	104	0	85 - 120		%REC	1	09/02/11 03:10 PM
Hexavalent Chromium-Water		**M3500-Cr D**					**Analyst: LM**
Hexavalent Chromium	0.0831	0.00800	0.0100		mg/L	1	08/31/11 11:09 AM
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.11	0	0		pH Units	1	09/01/11 11:07 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	1.45	0.300	1.00		mg/L	1	09/06/11 01:54 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	J	Analyte detected between MDL and RL
B	Analyte detected in the associated Method Blank	MDL	Method Detection Limit
C	Sample Result or QC discussed in the Case Narrative	N	Parameter not NELAC certified
DF	Dilution Factor	ND	Not Detected at the Method Detection Limit
E	TPH pattern not Gas or Diesel Range Pattern	RL	Reporting Limit
		S	Spike Recovery outside control limits

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Project No:
Lab Order: 1108430

Client Sample ID: HLSF-0143-HMW-043-0811
Lab ID: 1108430-02
Collection Date: 08/30/11 12:07 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH Extractable by GC - Water		**M8015D**					**Analyst: DO**
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	09/02/11 10:39 AM
Surr: Isopropylbenzene	51.5	0	47 - 142		%REC	1	09/02/11 10:39 AM
Surr: Octacosane	87.4	0	51 - 124		%REC	1	09/02/11 10:39 AM
Trace Metals: ICP-MS - Water		**SW6020**					**Analyst: AJR**
Chromium	0.00994	0.00200	0.00600		mg/L	1	09/01/11 11:35 PM
8260 Water Volatiles by GC/MS		**SW8260C**					**Analyst: KL**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:34 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:34 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:34 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	09/02/11 03:34 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:34 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	09/02/11 03:34 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:34 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:34 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:34 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:34 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:34 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	09/02/11 03:34 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:34 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	J	Analyte detected between MDL and RL
B	Analyte detected in the associated Method Blank	MDL	Method Detection Limit
C	Sample Result or QC discussed in the Case Narrative	N	Parameter not NELAC certified
DF	Dilution Factor	ND	Not Detected at the Method Detection Limit
E	TPH pattern not Gas or Diesel Range Pattern	RL	Reporting Limit
		S	Spike Recovery outside control limits

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Project No:
Lab Order: 1108430

Client Sample ID: HLSF-0143-HMW-043-0811
Lab ID: 1108430-02
Collection Date: 08/30/11 12:07 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
Chloroform	0.000400	0.000300	0.00100	J	mg/L	1	09/02/11 03:34 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	09/02/11 03:34 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:34 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 03:34 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	09/02/11 03:34 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:34 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:34 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 03:34 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 03:34 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 03:34 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:34 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	09/02/11 03:34 PM
Surr: 1,2-Dichloroethane-d4	91.5	0	70 - 120		%REC	1	09/02/11 03:34 PM
Surr: 4-Bromofluorobenzene	103	0	75 - 120		%REC	1	09/02/11 03:34 PM
Surr: Dibromofluoromethane	97.6	0	85 - 115		%REC	1	09/02/11 03:34 PM
Surr: Toluene-d8	103	0	85 - 120		%REC	1	09/02/11 03:34 PM
Hexavalent Chromium-Water		**M3500-Cr D**					**Analyst: LM**
Hexavalent Chromium	<0.00800	0.00800	0.0100		mg/L	1	08/31/11 11:09 AM
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.30	0	0		pH Units	1	09/01/11 11:09 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	1.21	0.300	1.00		mg/L	1	09/06/11 02:13 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	J	Analyte detected between MDL and RL
B	Analyte detected in the associated Method Blank	MDL	Method Detection Limit
C	Sample Result or QC discussed in the Case Narrative	N	Parameter not NELAC certified
DF	Dilution Factor	ND	Not Detected at the Method Detection Limit
E	TPH pattern not Gas or Diesel Range Pattern	RL	Reporting Limit
		S	Spike Recovery outside control limits

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Project No:
Lab Order: 1108430

Client Sample ID: HLSF-0143-HMW-143-0811
Lab ID: 1108430-03
Collection Date: 08/30/11 12:07 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH Extractable by GC - Water		**M8015D**					**Analyst: DO**
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	09/02/11 10:48 AM
Surr: Isopropylbenzene	56.3	0	47 - 142		%REC	1	09/02/11 10:48 AM
Surr: Octacosane	88.0	0	51 - 124		%REC	1	09/02/11 10:48 AM
Trace Metals: ICP-MS - Water		**SW6020**					**Analyst: AJR**
Chromium	0.00993	0.00200	0.00600		mg/L	1	09/01/11 11:41 PM
8260 Water Volatiles by GC/MS		**SW8260C**					**Analyst: KL**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:58 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:58 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:58 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	09/02/11 03:58 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 03:58 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	09/02/11 03:58 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:58 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:58 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:58 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:58 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:58 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	09/02/11 03:58 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:58 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	J	Analyte detected between MDL and RL
B	Analyte detected in the associated Method Blank	MDL	Method Detection Limit
C	Sample Result or QC discussed in the Case Narrative	N	Parameter not NELAC certified
DF	Dilution Factor	ND	Not Detected at the Method Detection Limit
E	TPH pattern not Gas or Diesel Range Pattern	RL	Reporting Limit
		S	Spike Recovery outside control limits

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Project No:
Lab Order: 1108430

Client Sample ID: HLSF-0143-HMW-143-0811
Lab ID: 1108430-03
Collection Date: 08/30/11 12:07 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
Chloroform	0.000420	0.000300	0.00100	J	mg/L	1	09/02/11 03:58 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	09/02/11 03:58 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:58 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 03:58 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	09/02/11 03:58 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 03:58 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 03:58 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 03:58 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 03:58 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 03:58 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 03:58 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	09/02/11 03:58 PM
Surr: 1,2-Dichloroethane-d4	93.0	0	70 - 120		%REC	1	09/02/11 03:58 PM
Surr: 4-Bromofluorobenzene	101	0	75 - 120		%REC	1	09/02/11 03:58 PM
Surr: Dibromofluoromethane	98.8	0	85 - 115		%REC	1	09/02/11 03:58 PM
Surr: Toluene-d8	104	0	85 - 120		%REC	1	09/02/11 03:58 PM
Hexavalent Chromium-Water		**M3500-Cr D**					**Analyst: LM**
Hexavalent Chromium	<0.00800	0.00800	0.0100		mg/L	1	08/31/11 11:09 AM
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.35	0	0		pH Units	1	09/01/11 11:11 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	1.37	0.300	1.00		mg/L	1	09/06/11 02:33 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	J	Analyte detected between MDL and RL
B	Analyte detected in the associated Method Blank	MDL	Method Detection Limit
C	Sample Result or QC discussed in the Case Narrative	N	Parameter not NELAC certified
DF	Dilution Factor	ND	Not Detected at the Method Detection Limit
E	TPH pattern not Gas or Diesel Range Pattern	RL	Reporting Limit
		S	Spike Recovery outside control limits

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Project No:
Lab Order: 1108430

Client Sample ID: HLSF-0143-TB3-0811
Lab ID: 1108430-04
Collection Date: 08/30/11 12:07 PM
Matrix: Trip Blank

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 Water Volatiles by GC/MS		**SW8260C**					**Analyst: KL**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 04:22 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 04:22 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 04:22 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	09/02/11 04:22 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	09/02/11 04:22 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	09/02/11 04:22 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 04:22 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 04:22 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 04:22 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 04:22 PM
Acetone	0.00867	0.00500	0.0150	J	mg/L	1	09/02/11 04:22 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	09/02/11 04:22 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 04:22 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	J	Analyte detected between MDL and RL
B	Analyte detected in the associated Method Blank	MDL	Method Detection Limit
C	Sample Result or QC discussed in the Case Narrative	N	Parameter not NELAC certified
DF	Dilution Factor	ND	Not Detected at the Method Detection Limit
E	TPH pattern not Gas or Diesel Range Pattern	RL	Reporting Limit
		S	Spike Recovery outside control limits

DHL Analytical

Date: 09/12/11

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromium Spill
Project No:
Lab Order: 1108430

Client Sample ID: HLSF-0143-TB3-0811
Lab ID: 1108430-04
Collection Date: 08/30/11 12:07 PM
Matrix: Trip Blank

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	09/02/11 04:22 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 04:22 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 04:22 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	09/02/11 04:22 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	09/02/11 04:22 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/02/11 04:22 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 04:22 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 04:22 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	09/02/11 04:22 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	09/02/11 04:22 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	09/02/11 04:22 PM
Surr: 1,2-Dichloroethane-d4	91.2	0	70 - 120		%REC	1	09/02/11 04:22 PM
Surr: 4-Bromofluorobenzene	103	0	75 - 120		%REC	1	09/02/11 04:22 PM
Surr: Dibromofluoromethane	96.6	0	85 - 115		%REC	1	09/02/11 04:22 PM
Surr: Toluene-d8	104	0	85 - 120		%REC	1	09/02/11 04:22 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	J	Analyte detected between MDL and RL
B	Analyte detected in the associated Method Blank	MDL	Method Detection Limit
C	Sample Result or QC discussed in the Case Narrative	N	Parameter not NELAC certified
DF	Dilution Factor	ND	Not Detected at the Method Detection Limit
E	TPH pattern not Gas or Diesel Range Pattern	RL	Reporting Limit
		S	Spike Recovery outside control limits

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_110902A

Sample ID:	**LCS-48102**	**Batch ID:**	**48102**		**TestNo:**		**M8015D**		**Units:**		**mg/L**
SampType:	**LCS**	**Run ID:**	**GC15_110902A**		**Analysis Date:**		**09/02/11 09:54 AM**		**Prep Date:**		**09/01/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		1.15	0.100	1.250	0	91.6	50	114			
Surr: Isopropylbenzene		0.0602		0.1000		60.2	47	142			
Surr: Octacosane		0.0868		0.1000		86.8	51	124			

Sample ID:	**LCSD-48102**	**Batch ID:**	**48102**		**TestNo:**		**M8015D**		**Units:**		**mg/L**
SampType:	**LCSD**	**Run ID:**	**GC15_110902A**		**Analysis Date:**		**09/02/11 10:03 AM**		**Prep Date:**		**09/01/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		1.16	0.100	1.250	0	92.6	50	114	1.05	30	
Surr: Isopropylbenzene		0.0563		0.1000		56.3	47	142	0	0	
Surr: Octacosane		0.0887		0.1000		88.7	51	124	0	0	

Sample ID:	**MB-48102**	**Batch ID:**	**48102**		**TestNo:**		**M8015D**		**Units:**		**mg/L**
SampType:	**MBLK**	**Run ID:**	**GC15_110902A**		**Analysis Date:**		**09/02/11 10:21 AM**		**Prep Date:**		**09/01/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		<0.0500	0.100								
Surr: Isopropylbenzene		0.0485		0.1000		48.5	47	142			
Surr: Octacosane		0.0840		0.1000		84.0	51	124			

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_110902A

Sample ID:	**ICV-110902**	**Batch ID:**	**R56738**		**TestNo:**		**M8015D**		**Units:**		**mg/L**
SampType:	**ICV**	**Run ID:**	**GC15_110902A**		**Analysis Date:**		**09/02/11 09:45 AM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		537	0.100	500.0	0	107	80	120			
Surr: Isopropylbenzene		22.8		25.00		91.2	80	120			
Surr: Octacosane		23.6		25.00		94.6	80	120			

Sample ID:	**CCV1-110902**	**Batch ID:**	**R56738**		**TestNo:**		**M8015D**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**GC15_110902A**		**Analysis Date:**		**09/02/11 11:42 AM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		271	0.100	250.0	0	108	80	120			
Surr: Isopropylbenzene		11.7		12.50		93.8	80	120			
Surr: Octacosane		12.1		12.50		96.7	80	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_110901C

Sample ID:	**MB-48094**	**Batch ID:**	**48094**		**TestNo:**		**SW6020**			**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**ICP-MS2_110901C**		**Analysis Date:**		**09/01/11 10:37 PM**			**Prep Date:**	**09/01/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chromium		<0.00200	0.00600								

Sample ID:	**LCS-48094**	**Batch ID:**	**48094**		**TestNo:**		**SW6020**			**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**ICP-MS2_110901C**		**Analysis Date:**		**09/01/11 10:43 PM**			**Prep Date:**	**09/01/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chromium		0.187	0.00600	0.200	0	93.7	80	120			

Sample ID:	**LCSD-48094**	**Batch ID:**	**48094**		**TestNo:**		**SW6020**			**Units:**	**mg/L**
SampType:	**LCSD**	**Run ID:**	**ICP-MS2_110901C**		**Analysis Date:**		**09/01/11 10:49 PM**			**Prep Date:**	**09/01/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chromium		0.191	0.00600	0.200	0	95.4	80	120	1.80	15	

Sample ID:	**1108430-01C SD**	**Batch ID:**	**48094**		**TestNo:**		**SW6020**			**Units:**	**mg/L**
SampType:	**SD**	**Run ID:**	**ICP-MS2_110901C**		**Analysis Date:**		**09/01/11 11:06 PM**			**Prep Date:**	**09/01/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chromium		0.0833	0.0300	0	0.0770				7.90	10	

Sample ID:	**1108430-01C PDS**	**Batch ID:**	**48094**		**TestNo:**		**SW6020**			**Units:**	**mg/L**
SampType:	**PDS**	**Run ID:**	**ICP-MS2_110901C**		**Analysis Date:**		**09/02/11 12:15 AM**			**Prep Date:**	**09/01/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chromium		0.254	0.00600	0.200	0.0770	88.5	75	125			

Sample ID:	**1108430-01C MS**	**Batch ID:**	**48094**		**TestNo:**		**SW6020**			**Units:**	**mg/L**
SampType:	**MS**	**Run ID:**	**ICP-MS2_110901C**		**Analysis Date:**		**09/02/11 12:21 AM**			**Prep Date:**	**09/01/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chromium		0.251	0.00600	0.200	0.0770	87.2	80	120			

Sample ID:	**1108430-01C MSD**	**Batch ID:**	**48094**		**TestNo:**		**SW6020**			**Units:**	**mg/L**
SampType:	**MSD**	**Run ID:**	**ICP-MS2_110901C**		**Analysis Date:**		**09/02/11 12:26 AM**			**Prep Date:**	**09/01/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chromium		0.245	0.00600	0.200	0.0770	84.0	80	120	2.58	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_110901C

Sample ID:	**ICV1-110901**	**Batch ID:**	**R56736**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**ICV**	**Run ID:**	**ICP-MS2_110901C**		**Analysis Date:**		**09/01/11 01:54 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chromium		0.108	0.00600	0.100	0	108	90	110			

Sample ID:	**CCV4-110901**	**Batch ID:**	**R56736**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS2_110901C**		**Analysis Date:**		**09/02/11 12:49 AM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chromium		0.200	0.00600	0.200	0	100	90	110			

Sample ID:	**CCV3-110901**	**Batch ID:**	**R56736**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS2_110901C**		**Analysis Date:**		**09/01/11 09:04 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chromium		0.208	0.00600	0.200	0	104	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110902A

Sample ID:	**LCS-48041**	**Batch ID:**	**48041**	**TestNo:**	**SW8260C**	**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**GCMS5_110902A**	**Analysis Date:**	**09/02/11 11:09 AM**	**Prep Date:**	**09/02/11**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	0.0227	0.00100	0.0232	0	97.7	80	130			
1,1,1-Trichloroethane	0.0185	0.00100	0.0232	0	79.7	65	130			
1,1,2,2-Tetrachloroethane	0.0254	0.00100	0.0232	0	110	65	130			
1,1,2-Trichloroethane	0.0212	0.00100	0.0232	0	91.4	75	125			
1,1-Dichloroethane	0.0197	0.00100	0.0232	0	84.9	70	135			
1,1-Dichloroethene	0.0202	0.00100	0.0232	0	87.2	70	130			
1,1-Dichloropropene	0.0213	0.00100	0.0232	0	91.7	75	130			
1,2,3-Trichlorobenzene	0.0254	0.00500	0.0232	0	109	55	140			
1,2,3-Trichloropropane	0.0225	0.00100	0.0232	0	96.8	75	125			
1,2,4-Trichlorobenzene	0.0254	0.00500	0.0232	0	109	65	135			
1,2,4-Trimethylbenzene	0.0245	0.00500	0.0232	0	106	75	130			
1,2-Dibromo-3-chloropropane	0.0215	0.0100	0.0232	0	92.7	50	130			
1,2-Dibromoethane	0.0234	0.00100	0.0232	0	101	80	120			
1,2-Dichlorobenzene	0.0250	0.00100	0.0232	0	108	70	120			
1,2-Dichloroethane	0.0175	0.00100	0.0232	0	75.3	70	130			
1,2-Dichloropropane	0.0215	0.00100	0.0232	0	92.6	75	125			
1,3,5-Trimethylbenzene	0.0243	0.00500	0.0232	0	105	75	130			
1,3-Dichlorobenzene	0.0248	0.00100	0.0232	0	107	75	125			
1,3-Dichloropropane	0.0227	0.00100	0.0232	0	98.0	75	125			
1,4-Dichloro-2-butene	0.0281	0.00200	0.0232	0	121	50	150			
1,4-Dichlorobenzene	0.0242	0.00100	0.0232	0	104	75	125			
2,2-Dichloropropane	0.0218	0.00100	0.0232	0	93.8	70	135			
2-Butanone	0.0237	0.0150	0.0232	0	102	30	150			
2-Chloroethylvinylether	0.0215	0.0150	0.0232	0	92.7	50	150			
2-Chlorotoluene	0.0241	0.00100	0.0232	0	104	75	125			
2-Hexanone	0.0255	0.0150	0.0232	0	110	55	130			
4-Chlorotoluene	0.0240	0.00100	0.0232	0	103	75	130			
4-Methyl-2-pentanone	0.0258	0.0150	0.0232	0	111	60	135			
Acetone	0.0193	0.0150	0.0232	0	83.2	40	140			
Acrylonitrile	0.0422	0.00300	0.0464	0	91.0	50	150			
Benzene	0.0217	0.00100	0.0232	0	93.6	80	120			
Bromobenzene	0.0247	0.00100	0.0232	0	106	75	125			
Bromochloromethane	0.0216	0.00100	0.0232	0	93.0	65	130			
Bromodichloromethane	0.0190	0.00100	0.0232	0	82.1	75	120			
Bromoform	0.0208	0.00100	0.0232	0	89.9	70	130			
Bromomethane	0.0237	0.00100	0.0232	0	102	30	145			
Carbon disulfide	0.0192	0.0150	0.0232	0	82.5	35	160			
Carbon tetrachloride	0.0189	0.00100	0.0232	0	81.6	65	140			
Chlorobenzene	0.0227	0.00100	0.0232	0	97.9	80	120			
Chloroethane	0.0228	0.00100	0.0232	0	98.2	60	135			
Chloroform	0.0191	0.00100	0.0232	0	82.4	65	135			
Chloromethane	0.0295	0.00100	0.0232	0	127	40	125			S
cis-1,2-Dichloroethene	0.0218	0.00100	0.0232	0	94.0	70	125			
cis-1,3-Dichloropropene	0.0219	0.00100	0.0232	0	94.2	70	130			

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110902A

Dibromochloromethane	0.0219	0.00100	0.0232	0	94.5	60	135
Dibromomethane	0.0203	0.00100	0.0232	0	87.3	75	125
Dichlorodifluoromethane	0.0341	0.00100	0.0232	0	147	30	155
Ethylbenzene	0.0236	0.00100	0.0232	0	102	75	125
Hexachlorobutadiene	0.0244	0.00300	0.0232	0	105	50	140
Iodomethane	0.0279	0.0150	0.0232	0	120	50	150
Isopropylbenzene	0.0227	0.00100	0.0232	0	98.0	75	125
m,p-Xylene	0.0476	0.00200	0.0464	0	103	75	130
Methyl tert-butyl ether	0.0256	0.00100	0.0232	0	110	65	125
Methylene chloride	0.0214	0.00250	0.0232	0	92.3	55	140
n-Butylbenzene	0.0246	0.00100	0.0232	0	106	70	135
n-Propylbenzene	0.0249	0.00100	0.0232	0	107	70	130
Naphthalene	0.0262	0.0150	0.0232	0	113	55	138
o-Xylene	0.0244	0.00100	0.0232	0	105	80	120
p-Isopropyltoluene	0.0258	0.00100	0.0232	0	111	75	130
sec-Butylbenzene	0.0254	0.00100	0.0232	0	109	70	125
Styrene	0.0244	0.00100	0.0232	0	105	65	135
tert-Butylbenzene	0.0248	0.00100	0.0232	0	107	70	130
Tetrachloroethene	0.0236	0.00200	0.0232	0	102	45	150
Toluene	0.0208	0.00200	0.0232	0	89.7	75	120
trans-1,2-Dichloroethene	0.0216	0.00100	0.0232	0	93.2	60	140
trans-1,3-Dichloropropene	0.0189	0.00100	0.0232	0	81.4	55	140
Trichloroethene	0.0208	0.00200	0.0232	0	89.7	70	125
Trichlorofluoromethane	0.0193	0.00100	0.0232	0	83.3	60	145
Vinyl chloride	0.0262	0.00100	0.0232	0	113	50	145
Surr: 1,2-Dichloroethane-d4	165		200.0		82.5	70	120
Surr: 4-Bromofluorobenzene	197		200.0		98.4	75	120
Surr: Dibromofluoromethane	177		200.0		88.6	85	115
Surr: Toluene-d8	207		200.0		104	85	120

Sample ID:	**MB-48041**	**Batch ID:**	**48041**	**TestNo:**	**SW8260C**	**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**GCMS5_110902A**	**Analysis Date:**	**09/02/11 11:57 AM**	**Prep Date:**	**09/02/11**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	<0.000200	0.00100								
1,1,1-Trichloroethane	<0.000200	0.00100								
1,1,2,2-Tetrachloroethane	<0.000200	0.00100								
1,1,2-Trichloroethane	<0.000200	0.00100								
1,1-Dichloroethane	<0.000200	0.00100								
1,1-Dichloroethene	<0.000200	0.00100								
1,1-Dichloropropene	<0.000200	0.00100								
1,2,3-Trichlorobenzene	<0.00150	0.00500								
1,2,3-Trichloropropane	<0.000300	0.00100								
1,2,4-Trichlorobenzene	<0.00150	0.00500								
1,2,4-Trimethylbenzene	<0.00150	0.00500								
1,2-Dibromo-3-chloropropane	<0.00300	0.0100								
1,2-Dibromoethane	<0.000200	0.00100								
1,2-Dichlorobenzene	<0.000300	0.00100								

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110902A

1,2-Dichloroethane	<0.000300	0.00100
1,2-Dichloropropane	<0.000200	0.00100
1,3,5-Trimethylbenzene	<0.00150	0.00500
1,3-Dichlorobenzene	<0.000300	0.00100
1,3-Dichloropropane	<0.000200	0.00100
1,4-Dichloro-2-butene	<0.00200	0.00200
1,4-Dichlorobenzene	<0.000300	0.00100
2,2-Dichloropropane	<0.000200	0.00100
2-Butanone	<0.00500	0.0150
2-Chloroethylvinylether	<0.00500	0.0150
2-Chlorotoluene	<0.000300	0.00100
2-Hexanone	<0.00500	0.0150
4-Chlorotoluene	<0.000300	0.00100
4-Methyl-2-pentanone	<0.00500	0.0150
Acetone	<0.00500	0.0150
Acrylonitrile	<0.00100	0.00300
Benzene	<0.000200	0.00100
Bromobenzene	<0.000200	0.00100
Bromochloromethane	<0.000200	0.00100
Bromodichloromethane	<0.000200	0.00100
Bromoform	<0.000200	0.00100
Bromomethane	<0.000300	0.00100
Carbon disulfide	<0.00500	0.0150
Carbon tetrachloride	<0.000200	0.00100
Chlorobenzene	<0.000200	0.00100
Chloroethane	<0.000300	0.00100
Chloroform	<0.000300	0.00100
Chloromethane	<0.000300	0.00100
cis-1,2-Dichloroethene	<0.000200	0.00100
cis-1,3-Dichloropropene	<0.000200	0.00100
Dibromochloromethane	<0.000200	0.00100
Dibromomethane	<0.000200	0.00100
Dichlorodifluoromethane	<0.000200	0.00100
Ethylbenzene	<0.000300	0.00100
Hexachlorobutadiene	<0.00100	0.00300
Iodomethane	<0.00500	0.0150
Isopropylbenzene	<0.000200	0.00100
m,p-Xylene	<0.000600	0.00200
Methyl tert-butyl ether	<0.000300	0.00100
Methylene chloride	<0.00250	0.00250
n-Butylbenzene	<0.000300	0.00100
n-Propylbenzene	<0.000300	0.00100
Naphthalene	<0.00500	0.0150
o-Xylene	<0.000300	0.00100
p-Isopropyltoluene	<0.000300	0.00100
sec-Butylbenzene	<0.000300	0.00100
Styrene	<0.000200	0.00100

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110902A

tert-Butylbenzene	<0.000300	0.00100				
Tetrachloroethene	<0.000600	0.00200				
Toluene	<0.000600	0.00200				
trans-1,2-Dichloroethene	<0.000200	0.00100				
trans-1,3-Dichloropropene	<0.000200	0.00100				
Trichloroethene	<0.000600	0.00200				
Trichlorofluoromethane	<0.000200	0.00100				
Vinyl chloride	<0.000100	0.00100				
Surr: 1,2-Dichloroethane-d4	167		200.0	83.4	70	120
Surr: 4-Bromofluorobenzene	200		200.0	99.8	75	120
Surr: Dibromofluoromethane	182		200.0	90.8	85	115
Surr: Toluene-d8	210		200.0	105	85	120

Sample ID:	**1108240-02AMS**	**Batch ID:**	**48041**	**TestNo:**	**SW8260C**	**Units:**	**mg/L**
SampType:	**MS**	**Run ID:**	**GCMS5_110902A**	**Analysis Date:**	**09/02/11 07:11 PM**	**Prep Date:**	**09/02/11**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	0.0219	0.00100	0.0232	0	94.2	80	130			
1,1,1-Trichloroethane	0.0190	0.00100	0.0232	0	81.9	65	130			
1,1,2,2-Tetrachloroethane	0.0269	0.00100	0.0232	0	116	65	130			
1,1,2-Trichloroethane	0.0218	0.00100	0.0232	0	93.8	75	125			
1,1-Dichloroethane	0.0197	0.00100	0.0232	0	84.8	70	135			
1,1-Dichloroethene	0.0196	0.00100	0.0232	0	84.6	70	130			
1,1-Dichloropropene	0.0203	0.00100	0.0232	0	87.4	75	130			
1,2,3-Trichlorobenzene	0.0228	0.00500	0.0232	0	98.1	55	140			
1,2,3-Trichloropropane	0.0244	0.00100	0.0232	0	105	75	125			
1,2,4-Trichlorobenzene	0.0224	0.00500	0.0232	0	96.5	65	135			
1,2,4-Trimethylbenzene	0.0228	0.00500	0.0232	0	98.4	75	130			
1,2-Dibromo-3-chloropropane	0.0237	0.0100	0.0232	0	102	50	130			
1,2-Dibromoethane	0.0224	0.00100	0.0232	0	96.6	80	120			
1,2-Dichlorobenzene	0.0240	0.00100	0.0232	0	103	70	120			
1,2-Dichloroethane	0.0188	0.00100	0.0232	0	80.9	70	130			
1,2-Dichloropropane	0.0207	0.00100	0.0232	0	89.2	75	125			
1,3,5-Trimethylbenzene	0.0226	0.00500	0.0232	0	97.5	75	130			
1,3-Dichlorobenzene	0.0235	0.00100	0.0232	0	101	75	125			
1,3-Dichloropropane	0.0217	0.00100	0.0232	0	93.7	75	125			
1,4-Dichloro-2-butene	0.0294	0.00200	0.0232	0	127	50	150			
1,4-Dichlorobenzene	0.0229	0.00100	0.0232	0	98.8	75	125			
2,2-Dichloropropane	0.0192	0.00100	0.0232	0	82.5	70	135			
2-Butanone	0.0261	0.0150	0.0232	0	112	30	150			
2-Chloroethylvinylether	<0.00500	0.0150	0.0232	0	0	50	150			S
2-Chlorotoluene	0.0226	0.00100	0.0232	0	97.2	75	125			
2-Hexanone	0.0307	0.0150	0.0232	0	132	55	130			S
4-Chlorotoluene	0.0229	0.00100	0.0232	0	98.6	75	130			
4-Methyl-2-pentanone	0.0302	0.0150	0.0232	0	130	60	135			
Acetone	0.0226	0.0150	0.0232	0.00510	75.3	40	140			
Acrylonitrile	0.0447	0.00300	0.0464	0	96.3	50	150			
Benzene	0.0208	0.00100	0.0232	0	89.4	80	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110902A

Bromobenzene	0.0232	0.00100	0.0232	0	100	75	125
Bromochloromethane	0.0219	0.00100	0.0232	0	94.5	65	130
Bromodichloromethane	0.0198	0.00100	0.0232	0	85.1	75	120
Bromoform	0.0212	0.00100	0.0232	0	91.4	70	130
Bromomethane	0.0218	0.00100	0.0232	0	93.9	30	145
Carbon disulfide	0.0184	0.0150	0.0232	0	79.4	35	160
Carbon tetrachloride	0.0195	0.00100	0.0232	0	84.2	65	140
Chlorobenzene	0.0216	0.00100	0.0232	0	92.9	80	120
Chloroethane	0.0224	0.00100	0.0232	0	96.6	60	135
Chloroform	0.0195	0.00100	0.0232	0	84.0	65	135
Chloromethane	0.0288	0.00100	0.0232	0	124	40	125
cis-1,2-Dichloroethene	0.0204	0.00100	0.0232	0	87.9	70	125
cis-1,3-Dichloropropene	0.0193	0.00100	0.0232	0	83.2	70	130
Dibromochloromethane	0.0215	0.00100	0.0232	0	92.8	60	135
Dibromomethane	0.0207	0.00100	0.0232	0	89.2	75	125
Dichlorodifluoromethane	0.0345	0.00100	0.0232	0	149	30	155
Ethylbenzene	0.0222	0.00100	0.0232	0	95.9	75	125
Hexachlorobutadiene	0.0225	0.00300	0.0232	0	97.0	50	140
Iodomethane	0.0145	0.0150	0.0232	0	62.3	50	150
Isopropylbenzene	0.0207	0.00100	0.0232	0	89.4	75	125
m,p-Xylene	0.0442	0.00200	0.0464	0	95.3	75	130
Methyl tert-butyl ether	0.0253	0.00100	0.0232	0	109	65	125
Methylene chloride	0.0210	0.00250	0.0232	0	90.4	55	140
n-Butylbenzene	0.0226	0.00100	0.0232	0	97.4	70	135
n-Propylbenzene	0.0232	0.00100	0.0232	0	99.9	70	130
Naphthalene	0.0241	0.0150	0.0232	0	104	55	138
o-Xylene	0.0220	0.00100	0.0232	0	94.9	80	120
p-Isopropyltoluene	0.0234	0.00100	0.0232	0	101	75	130
sec-Butylbenzene	0.0230	0.00100	0.0232	0	99.4	70	125
Styrene	0.0179	0.00100	0.0232	0	77.2	65	135
tert-Butylbenzene	0.0228	0.00100	0.0232	0	98.3	70	130
Tetrachloroethene	0.0218	0.00200	0.0232	0	93.9	45	150
Toluene	0.0203	0.00200	0.0232	0	87.6	75	120
trans-1,2-Dichloroethene	0.0205	0.00100	0.0232	0	88.4	60	140
trans-1,3-Dichloropropene	0.0186	0.00100	0.0232	0	80.0	55	140
Trichloroethene	0.0208	0.00200	0.0232	0	89.5	70	125
Trichlorofluoromethane	0.0209	0.00100	0.0232	0	90.0	60	145
Vinyl chloride	0.0252	0.00100	0.0232	0	109	50	145
Surr: 1,2-Dichloroethane-d4	186		200.0		92.8	70	120
Surr: 4-Bromofluorobenzene	193		200.0		96.5	75	120
Surr: Dibromofluoromethane	190		200.0		95.0	85	115
Surr: Toluene-d8	202		200.0		101	85	120

Sample ID:	**1108240-02AMSD**	**Batch ID:**	**48041**	**TestNo:**	**SW8260C**	**Units:**	**mg/L**
SampType:	**MSD**	**Run ID:**	**GCMS5_110902A**	**Analysis Date:**	**09/02/11 07:34 PM**	**Prep Date:**	**09/02/11**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	0.0220	0.00100	0.0232	0	94.8	80	130	0.638	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110902A

1,1,1-Trichloroethane	0.0189	0.00100	0.0232	0	81.6	65	130	0.369	30	
1,1,2,2-Tetrachloroethane	0.0266	0.00100	0.0232	0	115	65	130	1.35	30	
1,1,2-Trichloroethane	0.0212	0.00100	0.0232	0	91.6	75	125	2.42	30	
1,1-Dichloroethane	0.0192	0.00100	0.0232	0	83.0	70	135	2.21	30	
1,1-Dichloroethene	0.0195	0.00100	0.0232	0	84.0	70	130	0.665	30	
1,1-Dichloropropene	0.0204	0.00100	0.0232	0	88.1	75	130	0.835	30	
1,2,3-Trichlorobenzene	0.0237	0.00500	0.0232	0	102	55	140	4.22	30	
1,2,3-Trichloropropane	0.0243	0.00100	0.0232	0	105	75	125	0.411	30	
1,2,4-Trichlorobenzene	0.0229	0.00500	0.0232	0	98.5	65	135	2.03	30	
1,2,4-Trimethylbenzene	0.0227	0.00500	0.0232	0	97.9	75	130	0.483	30	
1,2-Dibromo-3-chloropropane	0.0243	0.0100	0.0232	0	105	50	130	2.50	30	
1,2-Dibromoethane	0.0226	0.00100	0.0232	0	97.2	80	120	0.712	30	
1,2-Dichlorobenzene	0.0239	0.00100	0.0232	0	103	70	120	0.376	30	
1,2-Dichloroethane	0.0184	0.00100	0.0232	0	79.4	70	130	1.99	30	
1,2-Dichloropropane	0.0204	0.00100	0.0232	0	88.1	75	125	1.22	30	
1,3,5-Trimethylbenzene	0.0226	0.00500	0.0232	0	97.3	75	130	0.133	30	
1,3-Dichlorobenzene	0.0239	0.00100	0.0232	0	103	75	125	1.52	30	
1,3-Dichloropropane	0.0217	0.00100	0.0232	0	93.7	75	125	0	30	
1,4-Dichloro-2-butene	0.0296	0.00200	0.0232	0	128	50	150	0.508	30	
1,4-Dichlorobenzene	0.0229	0.00100	0.0232	0	98.8	75	125	0	30	
2,2-Dichloropropane	0.0190	0.00100	0.0232	0	81.8	70	135	0.892	30	
2-Butanone	0.0249	0.0150	0.0232	0	107	30	150	4.83	30	
2-Chloroethylvinylether	<0.00500	0.0150	0.0232	0	0	50	150	0	30	S
2-Chlorotoluene	0.0225	0.00100	0.0232	0	97.0	75	125	0.178	30	
2-Hexanone	0.0297	0.0150	0.0232	0	128	55	130	3.15	30	
4-Chlorotoluene	0.0227	0.00100	0.0232	0	97.9	75	130	0.746	30	
4-Methyl-2-pentanone	0.0298	0.0150	0.0232	0	129	60	135	1.27	30	
Acetone	0.0218	0.0150	0.0232	0.00510	72.2	40	140	3.33	30	
Acrylonitrile	0.0444	0.00300	0.0464	0	95.7	50	150	0.696	30	
Benzene	0.0208	0.00100	0.0232	0	89.6	80	120	0.193	30	
Bromobenzene	0.0235	0.00100	0.0232	0	101	75	125	1.07	30	
Bromochloromethane	0.0214	0.00100	0.0232	0	92.2	65	130	2.40	30	
Bromodichloromethane	0.0196	0.00100	0.0232	0	84.4	75	120	0.916	30	
Bromoform	0.0209	0.00100	0.0232	0	90.2	70	130	1.28	30	
Bromomethane	0.0235	0.00100	0.0232	0	101	30	145	7.72	30	
Carbon disulfide	0.0185	0.0150	0.0232	0	79.9	35	160	0.595	30	
Carbon tetrachloride	0.0197	0.00100	0.0232	0	85.0	65	140	0.866	30	
Chlorobenzene	0.0215	0.00100	0.0232	0	92.8	80	120	0.186	30	
Chloroethane	0.0222	0.00100	0.0232	0	95.9	60	135	0.761	30	
Chloroform	0.0193	0.00100	0.0232	0	83.1	65	135	1.14	30	
Chloromethane	0.0292	0.00100	0.0232	0	126	40	125	1.14	30	S
cis-1,2-Dichloroethene	0.0204	0.00100	0.0232	0	88.0	70	125	0.049	30	
cis-1,3-Dichloropropene	0.0194	0.00100	0.0232	0	83.5	70	130	0.362	30	
Dibromochloromethane	0.0212	0.00100	0.0232	0	91.4	60	135	1.45	30	
Dibromomethane	0.0205	0.00100	0.0232	0	88.4	75	125	0.874	30	
Dichlorodifluoromethane	0.0348	0.00100	0.0232	0	150	30	155	0.867	30	
Ethylbenzene	0.0222	0.00100	0.0232	0	95.7	75	125	0.135	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110902A

Hexachlorobutadiene	0.0229	0.00300	0.0232	0	98.8	50	140	1.85	30
Iodomethane	0.0184	0.0150	0.0232	0	79.3	50	150	23.9	30
Isopropylbenzene	0.0207	0.00100	0.0232	0	89.1	75	125	0.338	30
m,p-Xylene	0.0438	0.00200	0.0464	0	94.4	75	130	0.977	30
Methyl tert-butyl ether	0.0252	0.00100	0.0232	0	109	65	125	0.238	30
Methylene chloride	0.0207	0.00250	0.0232	0	89.1	55	140	1.39	30
n-Butylbenzene	0.0227	0.00100	0.0232	0	97.9	70	135	0.530	30
n-Propylbenzene	0.0232	0.00100	0.0232	0	99.8	70	130	0.043	30
Naphthalene	0.0251	0.0150	0.0232	0	108	55	138	3.94	30
o-Xylene	0.0220	0.00100	0.0232	0	94.6	80	120	0.318	30
p-Isopropyltoluene	0.0237	0.00100	0.0232	0	102	75	130	1.14	30
sec-Butylbenzene	0.0231	0.00100	0.0232	0	99.7	70	125	0.346	30
Styrene	0.0176	0.00100	0.0232	0	75.9	65	135	1.75	30
tert-Butylbenzene	0.0231	0.00100	0.0232	0	99.5	70	130	1.18	30
Tetrachloroethene	0.0219	0.00200	0.0232	0	94.4	45	150	0.595	30
Toluene	0.0201	0.00200	0.0232	0	86.6	75	120	1.19	30
trans-1,2-Dichloroethene	0.0203	0.00100	0.0232	0	87.4	60	140	1.13	30
trans-1,3-Dichloropropene	0.0183	0.00100	0.0232	0	78.8	55	140	1.57	30
Trichloroethene	0.0204	0.00200	0.0232	0	88.0	70	125	1.70	30
Trichlorofluoromethane	0.0207	0.00100	0.0232	0	89.3	60	145	0.769	30
Vinyl chloride	0.0258	0.00100	0.0232	0	111	50	145	2.43	30
Surr: 1,2-Dichloroethane-d4	185		200.0		92.4	70	120	0	0
Surr: 4-Bromofluorobenzene	195		200.0		97.4	75	120	0	0
Surr: Dibromofluoromethane	188		200.0		93.9	85	115	0	0
Surr: Toluene-d8	204		200.0		102	85	120	0	0

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110902A

Sample ID:	**ICV-110902**	**Batch ID:**	**R56742**	**TestNo:**	**SW8260C**	**Units:**	**mg/L**
SampType:	**ICV**	**Run ID:**	**GCMS5_110902A**	**Analysis Date:**	**09/02/11 10:42 AM**	**Prep Date:**	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	0.0474	0.00100	0.0464	0	102	80	120			
1,1,1-Trichloroethane	0.0382	0.00100	0.0464	0	82.3	80	120			
1,1,2,2-Tetrachloroethane	0.0521	0.00100	0.0464	0	112	80	120			
1,1,2-Trichloroethane	0.0428	0.00100	0.0464	0	92.1	80	120			
1,1-Dichloroethane	0.0405	0.00100	0.0464	0	87.3	80	120			
1,1-Dichloroethene	0.0414	0.00100	0.0464	0	89.2	80	120			
1,1-Dichloropropene	0.0437	0.00100	0.0464	0	94.3	80	120			
1,2,3-Trichlorobenzene	0.0478	0.00500	0.0464	0	103	80	120			
1,2,3-Trichloropropane	0.0450	0.00100	0.0464	0	96.9	80	120			
1,2,4-Trichlorobenzene	0.0508	0.00500	0.0464	0	109	80	120			
1,2,4-Trimethylbenzene	0.0499	0.00500	0.0464	0	108	80	120			
1,2-Dibromo-3-chloropropane	0.0411	0.0100	0.0464	0	88.6	80	120			
1,2-Dibromoethane	0.0486	0.00100	0.0464	0	105	80	120			
1,2-Dichlorobenzene	0.0516	0.00100	0.0464	0	111	80	120			
1,2-Dichloroethane	0.0350	0.00100	0.0464	0	75.4	80	120			S
1,2-Dichloropropane	0.0442	0.00100	0.0464	0	95.2	80	120			
1,3,5-Trimethylbenzene	0.0496	0.00500	0.0464	0	107	80	120			
1,3-Dichlorobenzene	0.0511	0.00100	0.0464	0	110	80	120			
1,3-Dichloropropane	0.0462	0.00100	0.0464	0	99.6	80	120			
1,4-Dichloro-2-butene	0.0557	0.00200	0.0464	0	120	80	120			
1,4-Dichlorobenzene	0.0494	0.00100	0.0464	0	107	80	120			
2,2-Dichloropropane	0.0464	0.00100	0.0464	0	99.9	80	120			
2-Butanone	0.0460	0.0150	0.0464	0	99.1	80	120			
2-Chloroethylvinylether	0.0416	0.0150	0.0464	0	89.8	80	120			
2-Chlorotoluene	0.0489	0.00100	0.0464	0	105	80	120			
2-Hexanone	0.0490	0.0150	0.0464	0	106	80	120			
4-Chlorotoluene	0.0493	0.00100	0.0464	0	106	80	120			
4-Methyl-2-pentanone	0.0510	0.0150	0.0464	0	110	80	120			
Acetone	0.0380	0.0150	0.0464	0	81.8	80	120			
Acrylonitrile	0.0836	0.00300	0.0928	0	90.1	60	140			
Benzene	0.0440	0.00100	0.0464	0	94.9	80	120			
Bromobenzene	0.0511	0.00100	0.0464	0	110	80	120			
Bromochloromethane	0.0439	0.00100	0.0464	0	94.7	80	120			
Bromodichloromethane	0.0397	0.00100	0.0464	0	85.6	80	120			
Bromoform	0.0435	0.00100	0.0464	0	93.8	80	120			
Bromomethane	0.0446	0.00100	0.0464	0	96.2	80	120			
Carbon disulfide	0.0384	0.0150	0.0464	0	82.7	80	120			
Carbon tetrachloride	0.0398	0.00100	0.0464	0	85.8	80	120			
Chlorobenzene	0.0469	0.00100	0.0464	0	101	80	120			
Chloroethane	0.0448	0.00100	0.0464	0	96.5	80	120			
Chloroform	0.0391	0.00100	0.0464	0	84.2	80	120			
Chloromethane	0.0610	0.00100	0.0464	0	131	80	120			S
cis-1,2-Dichloroethene	0.0449	0.00100	0.0464	0	96.9	80	120			
cis-1,3-Dichloropropene	0.0456	0.00100	0.0464	0	98.3	80	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110902A

Dibromochloromethane	0.0467	0.00100	0.0464	0	101	80	120	
Dibromomethane	0.0413	0.00100	0.0464	0	88.9	80	120	
Dichlorodifluoromethane	0.0696	0.00100	0.0464	0	150	80	120	S
Ethylbenzene	0.0491	0.00100	0.0464	0	106	80	120	
Hexachlorobutadiene	0.0496	0.00300	0.0464	0	107	80	120	
Iodomethane	0.0570	0.0150	0.0464	0	123	80	120	S
Isopropylbenzene	0.0467	0.00100	0.0464	0	101	80	120	
m,p-Xylene	0.0981	0.00200	0.0928	0	106	80	120	
Methyl tert-butyl ether	0.0526	0.00100	0.0464	0	113	80	120	
Methylene chloride	0.0436	0.00250	0.0464	0	93.9	80	120	
n-Butylbenzene	0.0508	0.00100	0.0464	0	110	80	120	
n-Propylbenzene	0.0509	0.00100	0.0464	0	110	80	120	
Naphthalene	0.0500	0.0150	0.0464	0	108	80	120	
o-Xylene	0.0502	0.00100	0.0464	0	108	80	120	
p-Isopropyltoluene	0.0531	0.00100	0.0464	0	114	80	120	
sec-Butylbenzene	0.0510	0.00100	0.0464	0	110	80	120	
Styrene	0.0503	0.00100	0.0464	0	108	80	120	
tert-Butylbenzene	0.0508	0.00100	0.0464	0	110	80	120	
Tetrachloroethene	0.0485	0.00200	0.0464	0	105	80	120	
Toluene	0.0430	0.00200	0.0464	0	92.8	80	120	
trans-1,2-Dichloroethene	0.0445	0.00100	0.0464	0	95.9	80	120	
trans-1,3-Dichloropropene	0.0395	0.00100	0.0464	0	85.2	80	120	
Trichloroethene	0.0425	0.00200	0.0464	0	91.5	80	120	
Trichlorofluoromethane	0.0395	0.00100	0.0464	0	85.2	80	120	
Vinyl chloride	0.0538	0.00100	0.0464	0	116	80	120	
Surr: 1,2-Dichloroethane-d4	160		200.0		79.8	70	120	
Surr: 4-Bromofluorobenzene	199		200.0		99.5	75	120	
Surr: Dibromofluoromethane	178		200.0		88.9	85	115	
Surr: Toluene-d8	210		200.0		105	85	120	

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_110901A

Sample ID:	**1108430-01D DUP**	**Batch ID:**	**48100**	**TestNo:**	**M4500-H+ B**	**Units:**	**pH Units**
SampType:	**DUP**	**Run ID:**	**TITRATOR_110901A**	**Analysis Date:**	**09/01/11 11:08 AM**	**Prep Date:**	**09/01/11**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
pH	7.13	0	0	7.110				0.281	5	

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_110901A

Sample ID:	**ICV-110901**	**Batch ID:**	**R56721**	**TestNo:**	**M4500-H+ B**	**Units:**	**pH Units**
SampType:	**ICV**	**Run ID:**	**TITRATOR_110901A**	**Analysis Date:**	**09/01/11 11:06 AM**	**Prep Date:**	**09/01/11**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
pH	9.99	0	10.00	0	99.9	99	101			

Sample ID:	**CCV1-110901**	**Batch ID:**	**R56721**	**TestNo:**	**M4500-H+ B**	**Units:**	**pH Units**
SampType:	**CCV**	**Run ID:**	**TITRATOR_110901A**	**Analysis Date:**	**09/01/11 11:15 AM**	**Prep Date:**	**09/01/11**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
pH	7.02	0	7.000	0	100	97.1	102.9			

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: TOC_110906A

Sample ID:	**LCS-48142**	**Batch ID:**	**48142**		**TestNo:**		**M5310C**		**Units:**		**mg/L**
SampType:	**LCS**	**Run ID:**	**TOC_110906A**		**Analysis Date:**		**09/06/11 11:55 AM**		**Prep Date:**		**09/06/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		11.3	1.00	10.00	0	113	80	120			

Sample ID:	**MB-48142**	**Batch ID:**	**48142**		**TestNo:**		**M5310C**		**Units:**		**mg/L**
SampType:	**MBLK**	**Run ID:**	**TOC_110906A**		**Analysis Date:**		**09/06/11 12:58 PM**		**Prep Date:**		**09/06/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		<0.300	1.00								

Sample ID:	**1108430-01B MS**	**Batch ID:**	**48142**		**TestNo:**		**M5310C**		**Units:**		**mg/L**
SampType:	**MS**	**Run ID:**	**TOC_110906A**		**Analysis Date:**		**09/06/11 03:20 PM**		**Prep Date:**		**09/06/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		11.6	1.00	10.00	1.453	101	80	120			

Sample ID:	**1108430-01B MSD**	**Batch ID:**	**48142**		**TestNo:**		**M5310C**		**Units:**		**mg/L**
SampType:	**MSD**	**Run ID:**	**TOC_110906A**		**Analysis Date:**		**09/06/11 03:46 PM**		**Prep Date:**		**09/06/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		11.5	1.00	10.00	1.453	101	80	120	0.733	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: TOC_110906A

Sample ID:	**ICV-110906**	**Batch ID:**	**R56784**		**TestNo:**		**M5310C**		**Units:**		**mg/L**
SampType:	**ICV**	**Run ID:**	**TOC_110906A**		**Analysis Date:**		**09/06/11 11:24 AM**		**Prep Date:**		**09/06/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		16.1	1.00	15.00	0	107	90	110			

Sample ID:	**CCV-110906**	**Batch ID:**	**R56784**		**TestNo:**		**M5310C**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**TOC_110906A**		**Analysis Date:**		**09/06/11 04:06 PM**		**Prep Date:**		**09/06/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		10.7	1.00	10.00	0	107	80	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_110831A

Sample ID:	**MB-48075**	**Batch ID:**	**48075**		**TestNo:**		**M3500-Cr D**		**Units:**		**mg/L**
SampType:	**MBLK**	**Run ID:**	**UV/VIS_2_110831A**		**Analysis Date:**		**08/31/11 11:09 AM**		**Prep Date:**		**08/31/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Hexavalent Chromium		<0.00800	0.0100								

Sample ID:	**LCS-48075**	**Batch ID:**	**48075**		**TestNo:**		**M3500-Cr D**		**Units:**		**mg/L**
SampType:	**LCS**	**Run ID:**	**UV/VIS_2_110831A**		**Analysis Date:**		**08/31/11 11:09 AM**		**Prep Date:**		**08/31/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Hexavalent Chromium		0.0954	0.0100	0.100	0	95.4	85	115			

Sample ID:	**LCSD-48075**	**Batch ID:**	**48075**		**TestNo:**		**M3500-Cr D**		**Units:**		**mg/L**
SampType:	**LCSD**	**Run ID:**	**UV/VIS_2_110831A**		**Analysis Date:**		**08/31/11 11:09 AM**		**Prep Date:**		**08/31/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Hexavalent Chromium		0.0944	0.0100	0.100	0	94.4	85	115	1.10	15	

Sample ID:	**1108430-01D MS**	**Batch ID:**	**48075**		**TestNo:**		**M3500-Cr D**		**Units:**		**mg/L**
SampType:	**MS**	**Run ID:**	**UV/VIS_2_110831A**		**Analysis Date:**		**08/31/11 11:09 AM**		**Prep Date:**		**08/31/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Hexavalent Chromium		0.190	0.0100	0.100	0.0831	107	85	115			

Sample ID:	**1108430-01D MSD**	**Batch ID:**	**48075**		**TestNo:**		**M3500-Cr D**		**Units:**		**mg/L**
SampType:	**MSD**	**Run ID:**	**UV/VIS_2_110831A**		**Analysis Date:**		**08/31/11 11:09 AM**		**Prep Date:**		**08/31/11**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Hexavalent Chromium		0.186	0.0100	0.100	0.0831	103	85	115	1.86	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1108430
Project: HELSTF Chromium Spill

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_110831A

Sample ID:	**ICV-110831**	**Batch ID:**	**R56699**		**TestNo:**		**M3500-Cr D**		**Units:**		**mg/L**
SampType:	**ICV**	**Run ID:**	**UV/VIS_2_110831A**		**Analysis Date:**		**08/31/11 11:09 AM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Hexavalent Chromium		0.0941	0.0100	0.100	0	94.1	90	110			

Sample ID:	**CCV-110831**	**Batch ID:**	**R56699**		**TestNo:**		**M3500-Cr D**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**UV/VIS_2_110831A**		**Analysis Date:**		**08/31/11 11:09 AM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Hexavalent Chromium		0.194	0.0100	0.200	0	97.2	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

DHL Analytical

Date: 09/12/11

Lab Order: 1108430
Client: Zia Engineering & Environmental
Project: HELSTF Chromium Spill

Sequence Report

Run ID: GC15_110902A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV-110902	-----	M8015D	R56738	1	09/02/11 09:45 AM	
LCS-48102	-----	M8015D	48102	1	09/02/11 09:54 AM	09/01/11
LCSD-48102	-----	M8015D	48102	1	09/02/11 10:03 AM	09/01/11
MB-48102	-----	M8015D	48102	1	09/02/11 10:21 AM	09/01/11
1108430-01E	HLSF-0143-HMW-011-0811	M8015D	48102	1	09/02/11 10:30 AM	09/01/11
1108430-02E	HLSF-0143-HMW-043-0811	M8015D	48102	1	09/02/11 10:39 AM	09/01/11
1108430-03E	HLSF-0143-HMW-143-0811	M8015D	48102	1	09/02/11 10:48 AM	09/01/11
CCV1-110902	-----	M8015D	R56738	1	09/02/11 11:42 AM	

DHL Analytical

Date: 09/12/11

Lab Order: 1108430
Client: Zia Engineering & Environmental
Project: HELSTF Chromium Spill

Sequence Report

Run ID: GCMS5_110902A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV-110902	-----	SW8260C	R56742	1	09/02/11 10:42 AM	
LCS-48041	-----	SW8260C	48041	1	09/02/11 11:09 AM	09/02/11
MB-48041	-----	SW8260C	48041	1	09/02/11 11:57 AM	09/02/11
1108430-01A	HLSF-0143-HMW-011-0811	SW8260C	48041	1	09/02/11 03:10 PM	09/02/11
1108430-02A	HLSF-0143-HMW-043-0811	SW8260C	48041	1	09/02/11 03:34 PM	09/02/11
1108430-03A	HLSF-0143-HMW-143-0811	SW8260C	48041	1	09/02/11 03:58 PM	09/02/11
1108430-04A	HLSF-0143-TB3-0811	SW8260C	48041	1	09/02/11 04:22 PM	09/02/11
1108240-02AMS	-----	SW8260C	48041	1	09/02/11 07:11 PM	09/02/11
1108240-02AMSD	-----	SW8260C	48041	1	09/02/11 07:34 PM	09/02/11

DHL Analytical

Date: 09/12/11

Lab Order: 1108430
Client: Zia Engineering & Environmental
Project: HELSTF Chromium Spill

Sequence Report

Run ID: ICP-MS2_110901C

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV1-110901	-----	SW6020	R56736	1	09/01/11 01:54 PM	
ICB1-110901	-----	SW6020	R56736	1	09/01/11 02:39 PM	
CCV3-110901	-----	SW6020	R56736	1	09/01/11 09:04 PM	
CCB3-110901	-----	SW6020	R56736	1	09/01/11 10:02 PM	
MB-48094	-----	SW6020	48094	1	09/01/11 10:37 PM	09/01/11
LCS-48094	-----	SW6020	48094	1	09/01/11 10:43 PM	09/01/11
LCSD-48094	-----	SW6020	48094	1	09/01/11 10:49 PM	09/01/11
1108430-01C	HLSF-0143-HMW-011-0811	SW6020	48094	1	09/01/11 11:00 PM	09/01/11
1108430-01C SD	HLSF-0143-HMW-011-0811	SW6020	48094	5	09/01/11 11:06 PM	09/01/11
1108430-02C	HLSF-0143-HMW-043-0811	SW6020	48094	1	09/01/11 11:35 PM	09/01/11
1108430-03C	HLSF-0143-HMW-143-0811	SW6020	48094	1	09/01/11 11:41 PM	09/01/11
1108430-01C PDS	HLSF-0143-HMW-011-0811	SW6020	48094	1	09/02/11 12:15 AM	09/01/11
1108430-01C MS	HLSF-0143-HMW-011-0811MS	SW6020	48094	1	09/02/11 12:21 AM	09/01/11
1108430-01C MSD	HLSF-0143-HMW-011-0811MSD	SW6020	48094	1	09/02/11 12:26 AM	09/01/11
CCV4-110901	-----	SW6020	R56736	1	09/02/11 12:49 AM	
CCB4-110901	-----	SW6020	R56736	1	09/02/11 01:18 AM	

DHL Analytical

Date: 09/12/11

Lab Order: 1108430
Client: Zia Engineering & Environmental
Project: HELSTF Chromium Spill

Sequence Report

Run ID: TITRATOR_110901A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV2-110901	-----	M4500-H+ B	R56721	1	09/01/11 11:04 AM	09/01/11
ICV1-110901	-----	M4500-H+ B	R56721	1	09/01/11 11:05 AM	09/01/11
ICV-110901	-----	M4500-H+ B	R56721	1	09/01/11 11:06 AM	09/01/11
1108430-01D	HLSF-0143-HMW-011-0811	M4500-H+ B	48100	1	09/01/11 11:07 AM	09/01/11
1108430-01D DUP	HLSF-0143-HMW-011-0811PD9	M4500-H+ B	48100	1	09/01/11 11:08 AM	09/01/11
1108430-02D	HLSF-0143-HMW-043-0811	M4500-H+ B	48100	1	09/01/11 11:09 AM	09/01/11
1108430-03D	HLSF-0143-HMW-143-0811	M4500-H+ B	48100	1	09/01/11 11:11 AM	09/01/11
CCV1-110901	-----	M4500-H+ B	R56721	1	09/01/11 11:15 AM	09/01/11

DHL Analytical

Date: 09/12/11

Lab Order: 1108430
Client: Zia Engineering & Environmental
Project: HELSTF Chromium Spill

Sequence Report

Run ID: TOC_110906A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV-110906	-----	M5310C	R56784	1	09/06/11 11:24 AM	09/06/11
LCS-48142	-----	M5310C	48142	1	09/06/11 11:55 AM	09/06/11
MB-48142	-----	M5310C	48142	1	09/06/11 12:58 PM	09/06/11
1108430-01B	HLSF-0143-HMW-011-0811	M5310C	48142	1	09/06/11 01:54 PM	09/06/11
1108430-02B	HLSF-0143-HMW-043-0811	M5310C	48142	1	09/06/11 02:13 PM	09/06/11
1108430-03B	HLSF-0143-HMW-143-0811	M5310C	48142	1	09/06/11 02:33 PM	09/06/11
1108430-01B MS	HLSF-0143-HMW-011-0811MS	M5310C	48142	1	09/06/11 03:20 PM	09/06/11
1108430-01B MSD	HLSF-0143-HMW-011-0811MSD	M5310C	48142	1	09/06/11 03:46 PM	09/06/11
CCV-110906	-----	M5310C	R56784	1	09/06/11 04:06 PM	09/06/11

DHL Analytical

Date: 09/12/11

Lab Order: 1108430
Client: Zia Engineering & Environmental
Project: HELSTF Chromium Spill

Sequence Report

Run ID: UV/VIS_2_110831A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV-110831	-----	M3500-Cr D	R56699	1	08/31/11 11:09 AM	
MB-48075	-----	M3500-Cr D	48075	1	08/31/11 11:09 AM	08/31/11
LCS-48075	-----	M3500-Cr D	48075	1	08/31/11 11:09 AM	08/31/11
LCSD-48075	-----	M3500-Cr D	48075	1	08/31/11 11:09 AM	08/31/11
1108430-01D	HLSF-0143-HMW-011-0811	M3500-Cr D	48075	1	08/31/11 11:09 AM	08/31/11
1108430-01D MS	HLSF-0143-HMW-011-0811MS	M3500-Cr D	48075	1	08/31/11 11:09 AM	08/31/11
1108430-01D MSD	HLSF-0143-HMW-011-0811MSD	M3500-Cr D	48075	1	08/31/11 11:09 AM	08/31/11
1108430-02D	HLSF-0143-HMW-043-0811	M3500-Cr D	48075	1	08/31/11 11:09 AM	08/31/11
1108430-03D	HLSF-0143-HMW-143-0811	M3500-Cr D	48075	1	08/31/11 11:09 AM	08/31/11
CCV-110831	-----	M3500-Cr D	R56699	1	08/31/11 11:09 AM	