April 06, 2011

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

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

Order No: 1103202

RE: HELSTF Chromate Spill Groundwater

Dear Brad Davis:

DHL Analytical received 4 sample(s) on 3/25/2011 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of DoD QSM Ver 4.1 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: T104704211-11-5 & DoD ELAP #ADE-1416 v2

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zia engineering & environmental consultants, llc
755 S. Telshor Blvd. Ste. F-201
Las Cruces, NM 88011
575-532-1526 u
575-532-1687 f

358 #1103202

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NO.

PROJECT NAME: HELSTF Chromate Spill Groundwater

SAMPLER'S SIGNATURE

DATE	TIME	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC	TOC	DRO	Hex. Chromium	Total Chromium						REMARKS
3/24-11	1035	HLSF-0143-HM00-039-0311	WATER		10	X	X	X	X	X						NOTE: 24 HR. HOLD TIME ON HEX. CHROME

PROJECT INFORMATION	SAMPLES RECEIVED	yes	1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LAB: (SIGNATURE)
PROJECT MANAGER: Brad Davis	TOTAL NO. OF CONTAINERS		(PRINTED NAME)	(PRINTED NAME) 3/25/11 830	(PRINTED NAME)
SHIPPING ID NO.	CHAIN OF CUSTODY SEALS	yes	RECEIVED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)	(COMPANY)
	GOOD CONDITION/CHILLED	4.2	(TIME/DATE) 3/24/11	(TIME/DATE) 3/25/11 830	(TIME/DATE)
VIA: LONE STAR	CONFORMING TO RECORD		SPECIAL INSTRUCTIONS / COMMENTS: PLEASE SEE ATTACHED ANALYTE LIST FOR DETAILS		

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CHAIN OF CUSTODY RECORD

#1103202

PAGE 1 OF 1

PROJECT NO.

PROJECT NAME: HELSTF Chromate Spill Groundwater

SAMPLER'S SIGNATURE: Juan Padilla

DATE	TIME	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC	TOC	DRO	Hex. Chromium	Total Chromium						REMARKS
3-24-11	1030	HLSF-0143-HMW-040-0311	WATER		10	X	X	X	X	X						
3-24-11	1030	HLSF-0143-HMW-040-0311-msd	WATER		10	X	X	X	X	X						NOTE: 24 HR. HOLD TIME ON HEX. CHROME
3-24-11	1030	HLSF-0143-TB-359-0311	WATER		2	X										
3-24-11	1056	HLSF-0143-HMW-041-0311	WATER		10	X	X	X	X	X						

PROJECT INFORMATION	SAMPLES RECEIVED	4.0	1. RELINQUISHED BY: (SIGNATURE) Juan Padilla	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LAB: (SIGNATURE)
PROJECT MANAGER: Brad Davis	TOTAL NO. OF CONTAINERS		(PRINTED NAME) Juan Padilla	(PRINTED NAME) 3/25/11 830	(PRINTED NAME)
SHIPPING ID NO.	CHAIN OF CUSTODY SEALS	4.0	RECEIVED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)	(COMPANY)
	GOOD CONDITION/CHILLED	1.3°	(TIME/DATE) 3/25/11	(TIME/DATE) 3/25/11 830	(TIME/DATE)
VIA: Lone Star	CONFORMS TO RECORD		SPECIAL INSTRUCTIONS/COMMENTS: PLEASE SEE ATTACHED ANALYTE LIST FOR DETAILS		

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47326668

1. To: Print Name (Person): JOHN DRAKE Phone (Important): (512) 380-8002

Company Name: DILL ANALYTICAL

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

Suite / Floor:

City: ROUND ROCK State: TX Zip: 78664

2. From: Print Name (Person): SANDY GALLEGOS Phone (Important): 575-532-1526

Company Name: ZIA ENGINEERING

Street Address: 755 S. TELSHOR BLVD.

Suite / Floor: STE. Q-201

City: LAS CRUCES State: NM Zip: 88011

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Release Signature

L 24 x W 14 x H 14

4. Package: Weight: 70

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Ship Date (mm/dd/yy): 02/11

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CUSTODY SEAL
DATE 2-24-11
SIGNATURE [illegible]

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2. From: Print Name (Person) / Phone (Important)

Company Name

Street Address

Suite / Floor

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- [ ] Ground (next day to most cities)
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Release Signature

L 24 x W 14 x H 14

4. Package: Weight: 40 x

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Ship Date: (mm/dd/yy) 03/24/11

5. Payment

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Date:

Time:

City

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CUSTODY SEAL
DATE 3-24-11
SIGNATURE

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DHL Analytical

Sample Receipt Checklist

Client Name **Zia Engineering & Environmental** Date Received: **3/25/2011**

Work Order Number **1103202** Received by **JB**

Checklist completed by: Signature 3/25/11 Date Reviewed by SS Initials 3-25-11 Date

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 ☐	4.2 °C , 1.3>
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Adjusted? NO Checked by JB

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

04/06/11
Date

RG-366/TRRP-13 December 2002

DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: HELSTF Chromate Spill Groundwater	Date: 4/6/11
Reviewer Name: Carlos Castro	Laboratory Work Order: 1103202
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 Chromate Spill Groundwater	Date: 4/6/11
Reviewer Name: Carlos Castro	Laboratory Work Order: 1103202

#[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				
		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	CASE NARRATIVE
Project:	HELSTF Chromate Spill Groundwater	
Lab Order:	1103202	

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 4.1 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 3/25/11. 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 4/4/11 the LCS recovery was slightly above control limits for 1,2-Dichlorobenzene and sec-Butylbenzene. These are flagged accordingly in the QC summary report. The ICV was within control limits and all samples were below detection limits for these compounds. No further corrective actions were taken.

Exception Report R7-03

For Volatiles analysis performed on 4/4/11 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 from this work order. The LCS was within control limits for these compounds. No further corrective actions were taken.

Exception Report R10-01

For Metals analysis the Hexavalent Chromium results were slightly higher than the total Chromium results samples HLSF-0143-HMW-039-0311 and HLSF-0143-HMW-041-0311. These are within the acceptable variation limits. No further corrective actions were taken.

A summary of project communication follows:

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.

Brad Davis of ZIA Requested a bottle kit from Jennifer Barker of DHL: via email on 2/22/11.

Kit sent on 2/24/11 via Lonestar Overnight, arrive by 2/25/11.

CLIENT:	Zia Engineering & Environmental	CASE NARRATIVE
Project:	HELSTF Chromate Spill Groundwater	
Lab Order:	1103202	

This sample delivery group arrived at DHL Analytical 3/25/11. Sample summary sent via email from Log-in to client on 3/25/11.

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

DHL Analytical

Date: 04/06/11

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater
Lab Order: 1103202

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recv'd
1103202-01	HLSF-0143-HMW-039-0311		03/24/11 10:35 AM	03/25/11
1103202-02	HLSF-0143-HMW-040-0311		03/24/11 10:30 AM	03/25/11
1103202-03	HLSF-0143-TB-359-0311		03/24/11 10:30 AM	03/25/11
1103202-04	HLSF-0143-HMW-041-0311		03/24/11 10:56 AM	03/25/11

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater
Lab Order: 1103202

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1103202-01A	HLSF-0143-HMW-039-0311	03/24/11 10:35 AM	Aqueous	SW5030C	Purge and Trap Water GC/MS	04/04/11 09:00 AM	45723
1103202-01B	HLSF-0143-HMW-039-0311	03/24/11 10:35 AM	Aqueous	M5310C	TOC prep Aqueous	03/28/11 08:07 AM	45622
1103202-01C	HLSF-0143-HMW-039-0311	03/24/11 10:35 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/28/11 08:57 AM	45619
1103202-01D	HLSF-0143-HMW-039-0311	03/24/11 10:35 AM	Aqueous	SW7196A	Hexachrom Prep Water	03/25/11 09:54 AM	45597
	HLSF-0143-HMW-039-0311	03/24/11 10:35 AM	Aqueous	M4500-H+ B	pH Preparation	03/25/11 10:30 AM	45607
1103202-01E	HLSF-0143-HMW-039-0311	03/24/11 10:35 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/25/11 10:42 AM	45599
1103202-02A	HLSF-0143-HMW-040-0311	03/24/11 10:30 AM	Aqueous	SW5030C	Purge and Trap Water GC/MS	04/04/11 09:00 AM	45723
1103202-02B	HLSF-0143-HMW-040-0311	03/24/11 10:30 AM	Aqueous	M5310C	TOC prep Aqueous	03/28/11 08:07 AM	45622
1103202-02C	HLSF-0143-HMW-040-0311	03/24/11 10:30 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/28/11 08:57 AM	45619
1103202-02D	HLSF-0143-HMW-040-0311	03/24/11 10:30 AM	Aqueous	SW7196A	Hexachrom Prep Water	03/25/11 09:54 AM	45597
	HLSF-0143-HMW-040-0311	03/24/11 10:30 AM	Aqueous	M4500-H+ B	pH Preparation	03/25/11 10:30 AM	45607
1103202-02E	HLSF-0143-HMW-040-0311	03/24/11 10:30 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/25/11 10:42 AM	45599
1103202-03A	HLSF-0143-TB-359-0311	03/24/11 10:30 AM	Trip Blank	SW5030C	Purge and Trap Water GC/MS	04/04/11 09:00 AM	45723
1103202-04A	HLSF-0143-HMW-041-0311	03/24/11 10:56 AM	Aqueous	SW5030C	Purge and Trap Water GC/MS	04/04/11 09:00 AM	45723
1103202-04B	HLSF-0143-HMW-041-0311	03/24/11 10:56 AM	Aqueous	M5310C	TOC prep Aqueous	03/28/11 08:07 AM	45622
1103202-04C	HLSF-0143-HMW-041-0311	03/24/11 10:56 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/28/11 08:57 AM	45619
1103202-04D	HLSF-0143-HMW-041-0311	03/24/11 10:56 AM	Aqueous	SW7196A	Hexachrom Prep Water	03/25/11 09:54 AM	45597
	HLSF-0143-HMW-041-0311	03/24/11 10:56 AM	Aqueous	M4500-H+ B	pH Preparation	03/25/11 10:30 AM	45607
1103202-04E	HLSF-0143-HMW-041-0311	03/24/11 10:56 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/25/11 10:42 AM	45599

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater
Lab Order: 1103202

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1103202-01A	HLSF-0143-HMW-039-0311	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	45723	1	04/04/11 12:13 PM	GCMS5_110404A
1103202-01B	HLSF-0143-HMW-039-0311	Aqueous	M5310C	Total Organic Carbon	45622	1	03/28/11 03:23 PM	TOC_110328A
1103202-01C	HLSF-0143-HMW-039-0311	Aqueous	SW6020	Trace Metals: ICP-MS - Water	45619	1	03/30/11 03:30 PM	ICP-MS3_110330A
1103202-01D	HLSF-0143-HMW-039-0311	Aqueous	M3500-Cr D	Hexavalent Chromium-Water	45597	1	03/25/11 10:44 AM	UV/VIS_2_110325A
	HLSF-0143-HMW-039-0311	Aqueous	M4500-H+ B	pH	45607	1	03/25/11 11:03 AM	TITRATOR_110325A
1103202-01E	HLSF-0143-HMW-039-0311	Aqueous	M8015D	TPH Extractable by GC - Water	45599	1	03/29/11 10:15 AM	GC15_110329A
1103202-02A	HLSF-0143-HMW-040-0311	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	45723	1	04/04/11 11:00 AM	GCMS5_110404A
1103202-02B	HLSF-0143-HMW-040-0311	Aqueous	M5310C	Total Organic Carbon	45622	1	03/28/11 04:02 PM	TOC_110328A
1103202-02C	HLSF-0143-HMW-040-0311	Aqueous	SW6020	Trace Metals: ICP-MS - Water	45619	1	03/30/11 03:08 PM	ICP-MS3_110330A
1103202-02D	HLSF-0143-HMW-040-0311	Aqueous	M3500-Cr D	Hexavalent Chromium-Water	45597	1	03/25/11 10:44 AM	UV/VIS_2_110325A
	HLSF-0143-HMW-040-0311	Aqueous	M4500-H+ B	pH	45607	1	03/25/11 11:04 AM	TITRATOR_110325A
1103202-02E	HLSF-0143-HMW-040-0311	Aqueous	M8015D	TPH Extractable by GC - Water	45599	1	03/29/11 10:24 AM	GC15_110329A
1103202-03A	HLSF-0143-TB-359-0311	Trip Blank	SW8260C	8260 Water Volatiles by GC/MS	45723	1	04/04/11 03:31 PM	GCMS5_110404A
1103202-04A	HLSF-0143-HMW-041-0311	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	45723	1	04/04/11 12:39 PM	GCMS5_110404A
1103202-04B	HLSF-0143-HMW-041-0311	Aqueous	M5310C	Total Organic Carbon	45622	1	03/28/11 05:06 PM	TOC_110328A
1103202-04C	HLSF-0143-HMW-041-0311	Aqueous	SW6020	Trace Metals: ICP-MS - Water	45619	1	03/30/11 03:35 PM	ICP-MS3_110330A
1103202-04D	HLSF-0143-HMW-041-0311	Aqueous	M3500-Cr D	Hexavalent Chromium-Water	45597	5	03/25/11 10:44 AM	UV/VIS_2_110325A
	HLSF-0143-HMW-041-0311	Aqueous	M4500-H+ B	pH	45607	1	03/25/11 11:07 AM	TITRATOR_110325A
1103202-04E	HLSF-0143-HMW-041-0311	Aqueous	M8015D	TPH Extractable by GC - Water	45599	1	03/29/11 10:33 AM	GC15_110329A

DHL Analytical

Date: 04/06/11

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater
Project No:
Lab Order: 1103202

Client Sample ID: HLSF-0143-HMW-039-0311
Lab ID: 1103202-01
Collection Date: 03/24/11 10:35 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	03/29/11 10:15 AM
Surr: Isopropylbenzene	68.5	0	47 - 142		%REC	1	03/29/11 10:15 AM
Surr: Octacosane	116	0	51 - 124		%REC	1	03/29/11 10:15 AM
Trace Metals: ICP-MS - Water		SW6020					Analyst: AJR
Chromium	0.159	0.00200	0.00600		mg/L	1	03/30/11 03:30 PM
8260 Water Volatiles by GC/MS		SW8260C					Analyst: KL
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
1,1-Dichloroethene	0.00129	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 12:13 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 12:13 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 12:13 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	04/04/11 12:13 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 12:13 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	04/04/11 12:13 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:13 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:13 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:13 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:13 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:13 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	04/04/11 12:13 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:13 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 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 Chromate Spill Groundwater
Project No:
Lab Order: 1103202

Client Sample ID: HLSF-0143-HMW-039-0311
Lab ID: 1103202-01
Collection Date: 03/24/11 10:35 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
Chloroform	0.000420	0.000300	0.00100	J	mg/L	1	04/04/11 12:13 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	04/04/11 12:13 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:13 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 12:13 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	04/04/11 12:13 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:13 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:13 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 12:13 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 12:13 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Trichloroethene	0.0408	0.000600	0.00200		mg/L	1	04/04/11 12:13 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:13 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	04/04/11 12:13 PM
Surr: 1,2-Dichloroethane-d4	101	0	70 - 120		%REC	1	04/04/11 12:13 PM
Surr: 4-Bromofluorobenzene	99.9	0	75 - 120		%REC	1	04/04/11 12:13 PM
Surr: Dibromofluoromethane	98.0	0	85 - 115		%REC	1	04/04/11 12:13 PM
Surr: Toluene-d8	99.6	0	85 - 120		%REC	1	04/04/11 12:13 PM
Hexavalent Chromium-Water		**M3500-Cr D**					**Analyst: LM**
Hexavalent Chromium	0.179	0.00800	0.0100		mg/L	1	03/25/11 10:44 AM
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.61	0	0		pH Units	1	03/25/11 11:03 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	1.77	0.300	1.00		mg/L	1	03/28/11 03:23 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: 04/06/11

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater
Project No:
Lab Order: 1103202

Client Sample ID: HLSF-0143-HMW-040-0311
Lab ID: 1103202-02
Collection Date: 03/24/11 10:30 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	03/29/11 10:24 AM
Surr: Isopropylbenzene	71.1	0	47 - 142		%REC	1	03/29/11 10:24 AM
Surr: Octacosane	114	0	51 - 124		%REC	1	03/29/11 10:24 AM
Trace Metals: ICP-MS - Water		SW6020					Analyst: AJR
Chromium	0.00395	0.00200	0.00600	J	mg/L	1	03/30/11 03:08 PM
8260 Water Volatiles by GC/MS		SW8260C					Analyst: KL
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 11:00 AM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 11:00 AM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 11:00 AM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	04/04/11 11:00 AM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 11:00 AM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	04/04/11 11:00 AM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 11:00 AM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 11:00 AM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 11:00 AM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 11:00 AM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 11:00 AM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	04/04/11 11:00 AM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 11:00 AM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM

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 Chromate Spill Groundwater
Project No:
Lab Order: 1103202

Client Sample ID: HLSF-0143-HMW-040-0311
Lab ID: 1103202-02
Collection Date: 03/24/11 10:30 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	04/04/11 11:00 AM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 11:00 AM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 11:00 AM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	04/04/11 11:00 AM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 11:00 AM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 11:00 AM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 11:00 AM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 11:00 AM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 11:00 AM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 11:00 AM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	04/04/11 11:00 AM
Surr: 1,2-Dichloroethane-d4	103	0	70 - 120		%REC	1	04/04/11 11:00 AM
Surr: 4-Bromofluorobenzene	102	0	75 - 120		%REC	1	04/04/11 11:00 AM
Surr: Dibromofluoromethane	100	0	85 - 115		%REC	1	04/04/11 11:00 AM
Surr: Toluene-d8	99.6	0	85 - 120		%REC	1	04/04/11 11:00 AM
Hexavalent Chromium-Water		**M3500-Cr D**					**Analyst: LM**
Hexavalent Chromium	<0.00800	0.00800	0.0100		mg/L	1	03/25/11 10:44 AM
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.47	0	0		pH Units	1	03/25/11 11:04 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	1.49	0.300	1.00		mg/L	1	03/28/11 04:02 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: 04/06/11

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater
Project No:
Lab Order: 1103202

Client Sample ID: HLSF-0143-TB-359-0311
Lab ID: 1103202-03
Collection Date: 03/24/11 10:30 AM
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	04/04/11 03:31 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 03:31 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 03:31 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 03:31 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	04/04/11 03:31 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 03:31 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	04/04/11 03:31 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 03:31 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 03:31 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 03:31 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 03:31 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 03:31 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	04/04/11 03:31 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 03:31 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 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: 04/06/11

CLIENT:	Zia Engineering & Environmental	Client Sample ID:	HLSF-0143-TB-359-0311
Project:	HELSTF Chromate Spill Groundwater	Lab ID:	1103202-03
Project No:		Collection Date:	03/24/11 10:30 AM
Lab Order:	1103202	Matrix:	Trip Blank

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	04/04/11 03:31 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 03:31 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 03:31 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	04/04/11 03:31 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 03:31 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 03:31 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 03:31 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 03:31 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 03:31 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 03:31 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	04/04/11 03:31 PM
Surr: 1,2-Dichloroethane-d4	103	0	70 - 120		%REC	1	04/04/11 03:31 PM
Surr: 4-Bromofluorobenzene	100	0	75 - 120		%REC	1	04/04/11 03:31 PM
Surr: Dibromofluoromethane	101	0	85 - 115		%REC	1	04/04/11 03:31 PM
Surr: Toluene-d8	99.7	0	85 - 120		%REC	1	04/04/11 03:31 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: 04/06/11

CLIENT: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater
Project No:
Lab Order: 1103202

Client Sample ID: HLSF-0143-HMW-041-0311
Lab ID: 1103202-04
Collection Date: 03/24/11 10:56 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	03/29/11 10:33 AM
Surr: Isopropylbenzene	66.1	0	47 - 142		%REC	1	03/29/11 10:33 AM
Surr: Octacosane	114	0	51 - 124		%REC	1	03/29/11 10:33 AM
Trace Metals: ICP-MS - Water		SW6020					Analyst: AJR
Chromium	0.455	0.00200	0.00600		mg/L	1	03/30/11 03:35 PM
8260 Water Volatiles by GC/MS		SW8260C					Analyst: KL
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
1,1-Dichloroethane	0.000470	0.000200	0.00100	J	mg/L	1	04/04/11 12:39 PM
1,1-Dichloroethene	0.00257	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 12:39 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 12:39 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 12:39 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	04/04/11 12:39 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	04/04/11 12:39 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	04/04/11 12:39 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:39 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:39 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:39 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:39 PM
Acetone	0.00531	0.00500	0.0150	J	mg/L	1	04/04/11 12:39 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	04/04/11 12:39 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:39 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 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 Chromate Spill Groundwater
Project No:
Lab Order: 1103202

Client Sample ID: HLSF-0143-HMW-041-0311
Lab ID: 1103202-04
Collection Date: 03/24/11 10:56 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
Chloroform	0.000820	0.000300	0.00100	J	mg/L	1	04/04/11 12:39 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	04/04/11 12:39 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:39 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 12:39 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	04/04/11 12:39 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	04/04/11 12:39 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	04/04/11 12:39 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 12:39 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	04/04/11 12:39 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Trichloroethene	0.0940	0.000600	0.00200		mg/L	1	04/04/11 12:39 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	04/04/11 12:39 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	04/04/11 12:39 PM
Surr: 1,2-Dichloroethane-d4	103	0	70 - 120		%REC	1	04/04/11 12:39 PM
Surr: 4-Bromofluorobenzene	99.4	0	75 - 120		%REC	1	04/04/11 12:39 PM
Surr: Dibromofluoromethane	99.2	0	85 - 115		%REC	1	04/04/11 12:39 PM
Surr: Toluene-d8	99.5	0	85 - 120		%REC	1	04/04/11 12:39 PM
Hexavalent Chromium-Water		**M3500-Cr D**					**Analyst: LM**
Hexavalent Chromium	0.515	0.0400	0.0500		mg/L	5	03/25/11 10:44 AM
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.52	0	0		pH Units	1	03/25/11 11:07 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	1.79	0.300	1.00		mg/L	1	03/28/11 05:06 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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_110329A

Sample ID:	LCS-45599	Batch ID:	45599		TestNo:		M8015D		Units:		mg/L
SampType:	LCS	Run ID:	GC15_110329A		Analysis Date:		03/29/11 09:21 AM		Prep Date:		03/25/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
TPH-DRO C10-C28		1.02	0.100	1.250	0	81.3	50	114			
Surr: Isopropylbenzene		0.0919		0.1500		61.2	47	142			
Surr: Octacosane		0.168		0.1500		112	51	124			

Sample ID:	1103202-02EMS	Batch ID:	45599		TestNo:		M8015D		Units:		mg/L
SampType:	MS	Run ID:	GC15_110329A		Analysis Date:		03/29/11 09:30 AM		Prep Date:		03/25/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
TPH-DRO C10-C28		1.19	0.100	1.250	0	94.9	50	114			
Surr: Isopropylbenzene		0.103		0.1500		68.9	47	142			
Surr: Octacosane		0.171		0.1500		114	51	124			

Sample ID:	1103202-02EMSD	Batch ID:	45599		TestNo:		M8015D		Units:		mg/L
SampType:	MSD	Run ID:	GC15_110329A		Analysis Date:		03/29/11 09:39 AM		Prep Date:		03/25/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
TPH-DRO C10-C28		1.19	0.100	1.250	0	95.6	50	114	0.720	30	
Surr: Isopropylbenzene		0.106		0.1500		70.5	47	142	0	0	
Surr: Octacosane		0.175		0.1500		117	51	124	0	0	

Sample ID:	MB-45599	Batch ID:	45599		TestNo:		M8015D		Units:		mg/L
SampType:	MBLK	Run ID:	GC15_110329A		Analysis Date:		03/29/11 09:57 AM		Prep Date:		03/25/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
TPH-DRO C10-C28		<0.0500	0.100								
Surr: Isopropylbenzene		0.0865		0.1500		57.7	47	142			
Surr: Octacosane		0.174		0.1500		116	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_110329A

Sample ID:	ICV-110329	Batch ID:	R54189		TestNo:		M8015D		Units:		mg/L
SampType:	ICV	Run ID:	GC15_110329A		Analysis Date:		03/29/11 09:10 AM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
TPH-DRO C10-C28		529	0.100	500.0	0	106	80	120			
Surr: Isopropylbenzene		24.8		25.00		99.0	80	120			
Surr: Octacosane		27.9		25.00		112	80	120			

Sample ID:	CCV1-110329	Batch ID:	R54189		TestNo:		M8015D		Units:		mg/L
SampType:	CCV	Run ID:	GC15_110329A		Analysis Date:		03/29/11 11:00 AM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
TPH-DRO C10-C28		235	0.100	250.0	0	94.1	80	120			
Surr: Isopropylbenzene		11.1		12.50		88.9	80	120			
Surr: Octacosane		13.6		12.50		109	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_110330A

Sample ID:	MB-45619	Batch ID:	45619		TestNo:		SW6020		Units:		mg/L
SampType:	MBLK	Run ID:	ICP-MS3_110330A		Analysis Date:		03/30/11 02:46 PM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Chromium		<0.00200	0.00600								

Sample ID:	LCS-45619	Batch ID:	45619		TestNo:		SW6020		Units:		mg/L
SampType:	LCS	Run ID:	ICP-MS3_110330A		Analysis Date:		03/30/11 02:51 PM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Chromium		0.182	0.00600	0.200	0	91.2	80	120			

Sample ID:	LCSD-45619	Batch ID:	45619		TestNo:		SW6020		Units:		mg/L
SampType:	LCSD	Run ID:	ICP-MS3_110330A		Analysis Date:		03/30/11 02:57 PM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Chromium		0.182	0.00600	0.200	0	91.2	80	120	0	15	

Sample ID:	1103202-02C SD	Batch ID:	45619		TestNo:		SW6020		Units:		mg/L
SampType:	SD	Run ID:	ICP-MS3_110330A		Analysis Date:		03/30/11 03:13 PM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Chromium		<0.0100	0.0300	0	0.00395				0	10	

Sample ID:	1103202-02C PDS	Batch ID:	45619		TestNo:		SW6020		Units:		mg/L
SampType:	PDS	Run ID:	ICP-MS3_110330A		Analysis Date:		03/30/11 03:41 PM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Chromium		0.173	0.00600	0.200	0.00395	84.6	75	125			

Sample ID:	1103202-02C MS	Batch ID:	45619		TestNo:		SW6020		Units:		mg/L
SampType:	MS	Run ID:	ICP-MS3_110330A		Analysis Date:		03/30/11 03:46 PM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Chromium		0.165	0.00600	0.200	0.00395	80.4	80	120			

Sample ID:	1103202-02C MSD	Batch ID:	45619		TestNo:		SW6020		Units:		mg/L
SampType:	MSD	Run ID:	ICP-MS3_110330A		Analysis Date:		03/30/11 03:52 PM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Chromium		0.168	0.00600	0.200	0.00395	82.0	80	120	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_110330A

Sample ID:	ICV1-110330	Batch ID:	R54200		TestNo:		SW6020		Units:		mg/L
SampType:	ICV	Run ID:	ICP-MS3_110330A		Analysis Date:		03/30/11 11:32 AM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Chromium		0.102	0.00600	0.100	0	102	90	110			

Sample ID:	CCV2-110330	Batch ID:	R54200		TestNo:		SW6020		Units:		mg/L
SampType:	CCV	Run ID:	ICP-MS3_110330A		Analysis Date:		03/30/11 02:23 PM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Chromium		0.186	0.00600	0.200	0	93.2	90	110			

Sample ID:	CCV3-110330	Batch ID:	R54200		TestNo:		SW6020		Units:		mg/L
SampType:	CCV	Run ID:	ICP-MS3_110330A		Analysis Date:		03/30/11 03:57 PM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Chromium		0.184	0.00600	0.200	0	91.8	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110404A

Sample ID:	LCS-45723	Batch ID:	45723	TestNo:	SW8260C	Units:	mg/L
SampType:	LCS	Run ID:	GCMS5_110404A	Analysis Date:	04/04/11 09:44 AM	Prep Date:	04/01/11

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	0.0271	0.00100	0.0232	0	117	80	130			
1,1,1-Trichloroethane	0.0270	0.00100	0.0232	0	116	65	130			
1,1,2,2-Tetrachloroethane	0.0294	0.00100	0.0232	0	127	65	130			
1,1,2-Trichloroethane	0.0272	0.00100	0.0232	0	117	75	125			
1,1-Dichloroethane	0.0266	0.00100	0.0232	0	115	70	135			
1,1-Dichloroethene	0.0263	0.00100	0.0232	0	113	70	130			
1,1-Dichloropropene	0.0270	0.00100	0.0232	0	116	75	130			
1,2,3-Trichlorobenzene	0.0278	0.00500	0.0232	0	120	55	140			
1,2,3-Trichloropropane	0.0287	0.00100	0.0232	0	124	75	125			
1,2,4-Trichlorobenzene	0.0278	0.00500	0.0232	0	120	65	135			
1,2,4-Trimethylbenzene	0.0278	0.00500	0.0232	0	120	75	130			
1,2-Dibromo-3-chloropropane	0.0260	0.0100	0.0232	0	112	50	130			
1,2-Dibromoethane	0.0274	0.00100	0.0232	0	118	80	120			
1,2-Dichlorobenzene	0.0281	0.00100	0.0232	0	121	70	120			S
1,2-Dichloroethane	0.0264	0.00100	0.0232	0	114	70	130			
1,2-Dichloropropane	0.0264	0.00100	0.0232	0	114	75	125			
1,3,5-Trimethylbenzene	0.0280	0.00500	0.0232	0	121	75	130			
1,3-Dichlorobenzene	0.0276	0.00100	0.0232	0	119	75	125			
1,3-Dichloropropane	0.0268	0.00100	0.0232	0	116	75	125			
1,4-Dichloro-2-butene	0.0263	0.00200	0.0232	0	114	50	150			
1,4-Dichlorobenzene	0.0274	0.00100	0.0232	0	118	75	125			
2,2-Dichloropropane	0.0285	0.00100	0.0232	0	123	70	135			
2-Butanone	0.0265	0.0150	0.0232	0	114	30	150			
2-Chloroethylvinylether	0.0268	0.0150	0.0232	0	116	50	150			
2-Chlorotoluene	0.0278	0.00100	0.0232	0	120	75	125			
2-Hexanone	0.0250	0.0150	0.0232	0	108	55	130			
4-Chlorotoluene	0.0278	0.00100	0.0232	0	120	75	130			
4-Methyl-2-pentanone	0.0270	0.0150	0.0232	0	116	60	135			
Acetone	0.0280	0.0150	0.0232	0	121	40	140			
Acrylonitrile	0.0562	0.00300	0.0464	0	121	50	150			
Benzene	0.0266	0.00100	0.0232	0	115	80	120			
Bromobenzene	0.0270	0.00100	0.0232	0	117	75	125			
Bromochloromethane	0.0269	0.00100	0.0232	0	116	65	130			
Bromodichloromethane	0.0266	0.00100	0.0232	0	114	75	120			
Bromoform	0.0269	0.00100	0.0232	0	116	70	130			
Bromomethane	0.0273	0.00100	0.0232	0	118	30	145			
Carbon disulfide	0.0271	0.0150	0.0232	0	117	35	160			
Carbon tetrachloride	0.0271	0.00100	0.0232	0	117	65	140			
Chlorobenzene	0.0266	0.00100	0.0232	0	115	80	120			
Chloroethane	0.0284	0.00100	0.0232	0	122	60	135			
Chloroform	0.0266	0.00100	0.0232	0	115	65	135			
Chloromethane	0.0278	0.00100	0.0232	0	120	40	125			
cis-1,2-Dichloroethene	0.0263	0.00100	0.0232	0	113	70	125			
cis-1,3-Dichloropropene	0.0273	0.00100	0.0232	0	118	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110404A

Dibromochloromethane	0.0265	0.00100	0.0232	0	114	60	135	
Dibromomethane	0.0261	0.00100	0.0232	0	112	75	125	
Dichlorodifluoromethane	0.0282	0.00100	0.0232	0	122	30	155	
Ethylbenzene	0.0272	0.00100	0.0232	0	117	75	125	
Hexachlorobutadiene	0.0289	0.00300	0.0232	0	125	50	140	
Iodomethane	0.0248	0.0150	0.0232	0	107	50	150	
Isopropylbenzene	0.0264	0.00100	0.0232	0	114	75	125	
m,p-Xylene	0.0553	0.00200	0.0464	0	119	75	130	
Methyl tert-butyl ether	0.0254	0.00100	0.0232	0	109	65	125	
Methylene chloride	0.0240	0.00250	0.0232	0	104	55	140	
n-Butylbenzene	0.0271	0.00100	0.0232	0	117	70	135	
n-Propylbenzene	0.0285	0.00100	0.0232	0	123	70	130	
Naphthalene	0.0271	0.0150	0.0232	0	117	55	138	
o-Xylene	0.0278	0.00100	0.0232	0	120	80	120	
p-Isopropyltoluene	0.0295	0.00100	0.0232	0	127	75	130	
sec-Butylbenzene	0.0296	0.00100	0.0232	0	128	70	125	S
Styrene	0.0277	0.00100	0.0232	0	119	65	135	
tert-Butylbenzene	0.0286	0.00100	0.0232	0	123	70	130	
Tetrachloroethene	0.0273	0.00200	0.0232	0	118	45	150	
Toluene	0.0267	0.00200	0.0232	0	115	75	120	
trans-1,2-Dichloroethene	0.0263	0.00100	0.0232	0	113	60	140	
trans-1,3-Dichloropropene	0.0251	0.00100	0.0232	0	108	55	140	
Trichloroethene	0.0260	0.00200	0.0232	0	112	70	125	
Trichlorofluoromethane	0.0271	0.00100	0.0232	0	117	60	145	
Vinyl chloride	0.0283	0.00100	0.0232	0	122	50	145	
Surr: 1,2-Dichloroethane-d4	201		200.0		100	70	120	
Surr: 4-Bromofluorobenzene	201		200.0		100	75	120	
Surr: Dibromofluoromethane	198		200.0		99.0	85	115	
Surr: Toluene-d8	199		200.0		99.4	85	120	

Sample ID:	MB-45723	Batch ID:	45723	TestNo:	SW8260C	Units:	mg/L
SampType:	MBLK	Run ID:	GCMS5_110404A	Analysis Date:	04/04/11 10:35 AM	Prep Date:	04/04/11

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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110404A

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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110404A

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	203		200.0	102	70	120
Surr: 4-Bromofluorobenzene	200		200.0	100	75	120
Surr: Dibromofluoromethane	198		200.0	99.1	85	115
Surr: Toluene-d8	197		200.0	98.7	85	120

Sample ID:	1103202-02AMS	Batch ID:	45723	TestNo:	SW8260C		Units:	mg/L	
SampType:	MS	Run ID:	GCMS5_110404A	Analysis Date:	04/04/11 01:03 PM		Prep Date:	04/04/11	
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane		0.0213	0.00100	0.0232	0	91.9	80	130			
1,1,1-Trichloroethane		0.0214	0.00100	0.0232	0	92.3	65	130			
1,1,2,2-Tetrachloroethane		0.0234	0.00100	0.0232	0	101	65	130			
1,1,2-Trichloroethane		0.0218	0.00100	0.0232	0	94.0	75	125			
1,1-Dichloroethane		0.0214	0.00100	0.0232	0	92.3	70	135			
1,1-Dichloroethene		0.0203	0.00100	0.0232	0	87.4	70	130			
1,1-Dichloropropene		0.0216	0.00100	0.0232	0	93.1	75	130			
1,2,3-Trichlorobenzene		0.0188	0.00500	0.0232	0	81.1	55	140			
1,2,3-Trichloropropane		0.0231	0.00100	0.0232	0	99.4	75	125			
1,2,4-Trichlorobenzene		0.0187	0.00500	0.0232	0	80.6	65	135			
1,2,4-Trimethylbenzene		0.0210	0.00500	0.0232	0	90.4	75	130			
1,2-Dibromo-3-chloropropane		0.0211	0.0100	0.0232	0	90.8	50	130			
1,2-Dibromoethane		0.0215	0.00100	0.0232	0	92.8	80	120			
1,2-Dichlorobenzene		0.0211	0.00100	0.0232	0	90.8	70	120			
1,2-Dichloroethane		0.0215	0.00100	0.0232	0	92.5	70	130			
1,2-Dichloropropane		0.0212	0.00100	0.0232	0	91.2	75	125			
1,3,5-Trimethylbenzene		0.0210	0.00500	0.0232	0	90.5	75	130			
1,3-Dichlorobenzene		0.0209	0.00100	0.0232	0	90.0	75	125			
1,3-Dichloropropane		0.0215	0.00100	0.0232	0	92.6	75	125			
1,4-Dichloro-2-butene		0.0203	0.00200	0.0232	0	87.5	50	150			
1,4-Dichlorobenzene		0.0210	0.00100	0.0232	0	90.6	75	125			
2,2-Dichloropropane		0.0221	0.00100	0.0232	0	95.1	70	135			
2-Butanone		0.0232	0.0150	0.0232	0	100	30	150			
2-Chloroethylvinylether		<0.00500	0.0150	0.0232	0	0	50	150			S
2-Chlorotoluene		0.0212	0.00100	0.0232	0	91.3	75	125			
2-Hexanone		0.0265	0.0150	0.0232	0	114	55	130			
4-Chlorotoluene		0.0210	0.00100	0.0232	0	90.6	75	130			
4-Methyl-2-pentanone		0.0279	0.0150	0.0232	0	120	60	135			
Acetone		0.0212	0.0150	0.0232	0	91.6	40	140			
Acrylonitrile		0.0448	0.00300	0.0464	0	96.5	50	150			
Benzene		0.0213	0.00100	0.0232	0	91.8	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110404A

Bromobenzene	0.0209	0.00100	0.0232	0	90.1	75	125
Bromochloromethane	0.0222	0.00100	0.0232	0	95.9	65	130
Bromodichloromethane	0.0214	0.00100	0.0232	0	92.4	75	120
Bromoform	0.0211	0.00100	0.0232	0	90.9	70	130
Bromomethane	0.0169	0.00100	0.0232	0	72.9	30	145
Carbon disulfide	0.0241	0.0150	0.0232	0	104	35	160
Carbon tetrachloride	0.0218	0.00100	0.0232	0	94.1	65	140
Chlorobenzene	0.0213	0.00100	0.0232	0	92.0	80	120
Chloroethane	0.0248	0.00100	0.0232	0	107	60	135
Chloroform	0.0222	0.00100	0.0232	0	95.5	65	135
Chloromethane	0.0235	0.00100	0.0232	0	101	40	125
cis-1,2-Dichloroethene	0.0210	0.00100	0.0232	0	90.4	70	125
cis-1,3-Dichloropropene	0.0200	0.00100	0.0232	0	86.1	70	130
Dibromochloromethane	0.0207	0.00100	0.0232	0	89.3	60	135
Dibromomethane	0.0210	0.00100	0.0232	0	90.6	75	125
Dichlorodifluoromethane	0.0250	0.00100	0.0232	0	108	30	155
Ethylbenzene	0.0214	0.00100	0.0232	0	92.4	75	125
Hexachlorobutadiene	0.0202	0.00300	0.0232	0	87.2	50	140
Iodomethane	0.0190	0.0150	0.0232	0	81.7	50	150
Isopropylbenzene	0.0202	0.00100	0.0232	0	86.9	75	125
m,p-Xylene	0.0435	0.00200	0.0464	0	93.8	75	130
Methyl tert-butyl ether	0.0199	0.00100	0.0232	0	85.6	65	125
Methylene chloride	0.0212	0.00250	0.0232	0	91.3	55	140
n-Butylbenzene	0.0190	0.00100	0.0232	0	82.0	70	135
n-Propylbenzene	0.0216	0.00100	0.0232	0	93.3	70	130
Naphthalene	0.0194	0.0150	0.0232	0	83.5	55	138
o-Xylene	0.0217	0.00100	0.0232	0	93.4	80	120
p-Isopropyltoluene	0.0214	0.00100	0.0232	0	92.2	75	130
sec-Butylbenzene	0.0215	0.00100	0.0232	0	92.8	70	125
Styrene	0.0191	0.00100	0.0232	0	82.4	65	135
tert-Butylbenzene	0.0213	0.00100	0.0232	0	91.7	70	130
Tetrachloroethene	0.0214	0.00200	0.0232	0	92.3	45	150
Toluene	0.0214	0.00200	0.0232	0	92.4	75	120
trans-1,2-Dichloroethene	0.0209	0.00100	0.0232	0	90.2	60	140
trans-1,3-Dichloropropene	0.0195	0.00100	0.0232	0	84.0	55	140
Trichloroethene	0.0211	0.00200	0.0232	0	91.0	70	125
Trichlorofluoromethane	0.0240	0.00100	0.0232	0	104	60	145
Vinyl chloride	0.0237	0.00100	0.0232	0	102	50	145
Surr: 1,2-Dichloroethane-d4	206		200.0		103	70	120
Surr: 4-Bromofluorobenzene	197		200.0		98.3	75	120
Surr: Dibromofluoromethane	201		200.0		101	85	115
Surr: Toluene-d8	199		200.0		99.3	85	120

Sample ID:	1103202-02AMSD	Batch ID:	45723	TestNo:	SW8260C	Units:	mg/L
SampType:	MSD	Run ID:	GCMS5_110404A	Analysis Date:	04/04/11 01:27 PM	Prep Date:	04/04/11

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	0.0241	0.00100	0.0232	0	104	80	130	12.4	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110404A

1,1,1-Trichloroethane	0.0235	0.00100	0.0232	0	101	65	130	9.30	30	
1,1,2,2-Tetrachloroethane	0.0277	0.00100	0.0232	0	119	65	130	17.0	30	
1,1,2-Trichloroethane	0.0250	0.00100	0.0232	0	108	75	125	13.7	30	
1,1-Dichloroethane	0.0237	0.00100	0.0232	0	102	70	135	9.98	30	
1,1-Dichloroethene	0.0227	0.00100	0.0232	0	97.8	70	130	11.2	30	
1,1-Dichloropropene	0.0236	0.00100	0.0232	0	102	75	130	8.72	30	
1,2,3-Trichlorobenzene	0.0227	0.00500	0.0232	0	97.9	55	140	18.8	30	
1,2,3-Trichloropropane	0.0278	0.00100	0.0232	0	120	75	125	18.7	30	
1,2,4-Trichlorobenzene	0.0218	0.00500	0.0232	0	93.9	65	135	15.2	30	
1,2,4-Trimethylbenzene	0.0234	0.00500	0.0232	0	101	75	130	10.8	30	
1,2-Dibromo-3-chloropropane	0.0246	0.0100	0.0232	0	106	50	130	15.4	30	
1,2-Dibromoethane	0.0252	0.00100	0.0232	0	109	80	120	15.8	30	
1,2-Dichlorobenzene	0.0239	0.00100	0.0232	0	103	70	120	12.5	30	
1,2-Dichloroethane	0.0240	0.00100	0.0232	0	104	70	130	11.2	30	
1,2-Dichloropropane	0.0237	0.00100	0.0232	0	102	75	125	11.2	30	
1,3,5-Trimethylbenzene	0.0234	0.00500	0.0232	0	101	75	130	11.1	30	
1,3-Dichlorobenzene	0.0238	0.00100	0.0232	0	102	75	125	13.0	30	
1,3-Dichloropropane	0.0243	0.00100	0.0232	0	105	75	125	12.3	30	
1,4-Dichloro-2-butene	0.0247	0.00200	0.0232	0	106	50	150	19.5	30	
1,4-Dichlorobenzene	0.0234	0.00100	0.0232	0	101	75	125	10.9	30	
2,2-Dichloropropane	0.0238	0.00100	0.0232	0	103	70	135	7.71	30	
2-Butanone	0.0262	0.0150	0.0232	0	113	30	150	12.1	30	
2-Chloroethylvinylether	<0.00500	0.0150	0.0232	0	0	50	150	0	30	S
2-Chlorotoluene	0.0239	0.00100	0.0232	0	103	75	125	11.9	30	
2-Hexanone	0.0310	0.0150	0.0232	0	134	55	130	15.6	30	S
4-Chlorotoluene	0.0238	0.00100	0.0232	0	102	75	130	12.3	30	
4-Methyl-2-pentanone	0.0317	0.0150	0.0232	0	137	60	135	12.9	30	S
Acetone	0.0242	0.0150	0.0232	0	104	40	140	12.9	30	
Acrylonitrile	0.0546	0.00300	0.0464	0	118	50	150	19.7	30	
Benzene	0.0236	0.00100	0.0232	0	102	80	120	10.4	30	
Bromobenzene	0.0236	0.00100	0.0232	0	102	75	125	12.1	30	
Bromochloromethane	0.0246	0.00100	0.0232	0	106	65	130	10.1	30	
Bromodichloromethane	0.0240	0.00100	0.0232	0	103	75	120	11.1	30	
Bromoform	0.0247	0.00100	0.0232	0	106	70	130	15.7	30	
Bromomethane	0.0192	0.00100	0.0232	0	82.7	30	145	12.6	30	
Carbon disulfide	0.0241	0.0150	0.0232	0	104	35	160	0.083	30	
Carbon tetrachloride	0.0237	0.00100	0.0232	0	102	65	140	8.13	30	
Chlorobenzene	0.0237	0.00100	0.0232	0	102	80	120	10.6	30	
Chloroethane	0.0260	0.00100	0.0232	0	112	60	135	4.45	30	
Chloroform	0.0242	0.00100	0.0232	0	104	65	135	8.97	30	
Chloromethane	0.0249	0.00100	0.0232	0	107	40	125	5.87	30	
cis-1,2-Dichloroethene	0.0233	0.00100	0.0232	0	100	70	125	10.5	30	
cis-1,3-Dichloropropene	0.0227	0.00100	0.0232	0	97.8	70	130	12.7	30	
Dibromochloromethane	0.0234	0.00100	0.0232	0	101	60	135	12.1	30	
Dibromomethane	0.0238	0.00100	0.0232	0	103	75	125	12.3	30	
Dichlorodifluoromethane	0.0265	0.00100	0.0232	0	114	30	155	5.83	30	
Ethylbenzene	0.0241	0.00100	0.0232	0	104	75	125	11.6	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110404A

Hexachlorobutadiene	0.0222	0.00300	0.0232	0	95.8	50	140	9.43	30
Iodomethane	0.0233	0.0150	0.0232	0	100	50	150	20.5	30
Isopropylbenzene	0.0227	0.00100	0.0232	0	97.8	75	125	11.9	30
m,p-Xylene	0.0486	0.00200	0.0464	0	105	75	130	10.9	30
Methyl tert-butyl ether	0.0232	0.00100	0.0232	0	100	65	125	15.6	30
Methylene chloride	0.0235	0.00250	0.0232	0	101	55	140	10.3	30
n-Butylbenzene	0.0213	0.00100	0.0232	0	91.9	70	135	11.4	30
n-Propylbenzene	0.0238	0.00100	0.0232	0	103	70	130	9.63	30
Naphthalene	0.0240	0.0150	0.0232	0	103	55	138	21.3	30
o-Xylene	0.0242	0.00100	0.0232	0	104	80	120	11.2	30
p-Isopropyltoluene	0.0239	0.00100	0.0232	0	103	75	130	10.9	30
sec-Butylbenzene	0.0239	0.00100	0.0232	0	103	70	125	10.6	30
Styrene	0.0213	0.00100	0.0232	0	91.7	65	135	10.7	30
tert-Butylbenzene	0.0239	0.00100	0.0232	0	103	70	130	11.7	30
Tetrachloroethene	0.0236	0.00200	0.0232	0	102	45	150	9.65	30
Toluene	0.0241	0.00200	0.0232	0	104	75	120	11.6	30
trans-1,2-Dichloroethene	0.0230	0.00100	0.0232	0	99.1	60	140	9.38	30
trans-1,3-Dichloropropene	0.0222	0.00100	0.0232	0	95.9	55	140	13.2	30
Trichloroethene	0.0230	0.00200	0.0232	0	99.1	70	125	8.53	30
Trichlorofluoromethane	0.0252	0.00100	0.0232	0	109	60	145	4.91	30
Vinyl chloride	0.0257	0.00100	0.0232	0	111	50	145	8.27	30
Surr: 1,2-Dichloroethane-d4	205		200.0		102	70	120	0	0
Surr: 4-Bromofluorobenzene	197		200.0		98.3	75	120	0	0
Surr: Dibromofluoromethane	199		200.0		99.4	85	115	0	0
Surr: Toluene-d8	198		200.0		98.8	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110404A

Sample ID:	ICV-110404	Batch ID:	R54259		TestNo:		SW8260C		Units:		mg/L
SampType:	ICV	Run ID:	GCMS5_110404A		Analysis Date:		04/04/11 09:19 AM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane		0.0496	0.00100	0.0464	0	107	80	120			
1,1,1-Trichloroethane		0.0478	0.00100	0.0464	0	103	80	120			
1,1,2,2-Tetrachloroethane		0.0496	0.00100	0.0464	0	107	80	120			
1,1,2-Trichloroethane		0.0484	0.00100	0.0464	0	104	80	120			
1,1-Dichloroethane		0.0472	0.00100	0.0464	0	102	80	120			
1,1-Dichloroethene		0.0448	0.00100	0.0464	0	96.6	80	120			
1,1-Dichloropropene		0.0484	0.00100	0.0464	0	104	80	120			
1,2,3-Trichlorobenzene		0.0448	0.00500	0.0464	0	96.6	80	120			
1,2,3-Trichloropropane		0.0503	0.00100	0.0464	0	108	80	120			
1,2,4-Trichlorobenzene		0.0466	0.00500	0.0464	0	100	80	120			
1,2,4-Trimethylbenzene		0.0479	0.00500	0.0464	0	103	80	120			
1,2-Dibromo-3-chloropropane		0.0451	0.0100	0.0464	0	97.2	80	120			
1,2-Dibromoethane		0.0494	0.00100	0.0464	0	107	80	120			
1,2-Dichlorobenzene		0.0485	0.00100	0.0464	0	104	80	120			
1,2-Dichloroethane		0.0472	0.00100	0.0464	0	102	80	120			
1,2-Dichloropropane		0.0481	0.00100	0.0464	0	104	80	120			
1,3,5-Trimethylbenzene		0.0477	0.00500	0.0464	0	103	80	120			
1,3-Dichlorobenzene		0.0482	0.00100	0.0464	0	104	80	120			
1,3-Dichloropropane		0.0489	0.00100	0.0464	0	105	80	120			
1,4-Dichloro-2-butene		0.0465	0.00200	0.0464	0	100	80	120			
1,4-Dichlorobenzene		0.0467	0.00100	0.0464	0	101	80	120			
2,2-Dichloropropane		0.0509	0.00100	0.0464	0	110	80	120			
2-Butanone		0.0527	0.0150	0.0464	0	114	80	120			
2-Chloroethylvinylether		0.0497	0.0150	0.0464	0	107	80	120			
2-Chlorotoluene		0.0480	0.00100	0.0464	0	104	80	120			
2-Hexanone		0.0485	0.0150	0.0464	0	104	80	120			
4-Chlorotoluene		0.0481	0.00100	0.0464	0	104	80	120			
4-Methyl-2-pentanone		0.0530	0.0150	0.0464	0	114	80	120			
Acetone		0.0515	0.0150	0.0464	0	111	80	120			
Acrylonitrile		0.102	0.00300	0.0928	0	110	60	140			
Benzene		0.0470	0.00100	0.0464	0	101	80	120			
Bromobenzene		0.0470	0.00100	0.0464	0	101	80	120			
Bromochloromethane		0.0481	0.00100	0.0464	0	104	80	120			
Bromodichloromethane		0.0492	0.00100	0.0464	0	106	80	120			
Bromoform		0.0498	0.00100	0.0464	0	107	80	120			
Bromomethane		0.0461	0.00100	0.0464	0	99.4	80	120			
Carbon disulfide		0.0495	0.0150	0.0464	0	107	80	120			
Carbon tetrachloride		0.0483	0.00100	0.0464	0	104	80	120			
Chlorobenzene		0.0471	0.00100	0.0464	0	102	80	120			
Chloroethane		0.0482	0.00100	0.0464	0	104	80	120			
Chloroform		0.0479	0.00100	0.0464	0	103	80	120			
Chloromethane		0.0502	0.00100	0.0464	0	108	80	120			
cis-1,2-Dichloroethene		0.0474	0.00100	0.0464	0	102	80	120			
cis-1,3-Dichloropropene		0.0506	0.00100	0.0464	0	109	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_110404A

Dibromochloromethane	0.0487	0.00100	0.0464	0	105	80	120
Dibromomethane	0.0467	0.00100	0.0464	0	101	80	120
Dichlorodifluoromethane	0.0510	0.00100	0.0464	0	110	80	120
Ethylbenzene	0.0482	0.00100	0.0464	0	104	80	120
Hexachlorobutadiene	0.0487	0.00300	0.0464	0	105	80	120
Iodomethane	0.0475	0.0150	0.0464	0	102	80	120
Isopropylbenzene	0.0462	0.00100	0.0464	0	99.6	80	120
m,p-Xylene	0.0973	0.00200	0.0928	0	105	80	120
Methyl tert-butyl ether	0.0451	0.00100	0.0464	0	97.1	80	120
Methylene chloride	0.0467	0.00250	0.0464	0	101	80	120
n-Butylbenzene	0.0459	0.00100	0.0464	0	99.0	80	120
n-Propylbenzene	0.0479	0.00100	0.0464	0	103	80	120
Naphthalene	0.0461	0.0150	0.0464	0	99.3	80	120
o-Xylene	0.0501	0.00100	0.0464	0	108	80	120
p-Isopropyltoluene	0.0505	0.00100	0.0464	0	109	80	120
sec-Butylbenzene	0.0496	0.00100	0.0464	0	107	80	120
Styrene	0.0499	0.00100	0.0464	0	107	80	120
tert-Butylbenzene	0.0500	0.00100	0.0464	0	108	80	120
Tetrachloroethene	0.0478	0.00200	0.0464	0	103	80	120
Toluene	0.0470	0.00200	0.0464	0	101	80	120
trans-1,2-Dichloroethene	0.0470	0.00100	0.0464	0	101	80	120
trans-1,3-Dichloropropene	0.0460	0.00100	0.0464	0	99.2	80	120
Trichloroethene	0.0462	0.00200	0.0464	0	99.7	80	120
Trichlorofluoromethane	0.0475	0.00100	0.0464	0	102	80	120
Vinyl chloride	0.0495	0.00100	0.0464	0	107	80	120
Surr: 1,2-Dichloroethane-d4	204		200.0		102	70	120
Surr: 4-Bromofluorobenzene	196		200.0		98.2	75	120
Surr: Dibromofluoromethane	198		200.0		99.1	85	115
Surr: Toluene-d8	198		200.0		99.2	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_110325A

Sample ID:	1103202-02D DUP	Batch ID:	45607	TestNo:	M4500-H+ B	Units:	pH Units
SampType:	DUP	Run ID:	TITRATOR_110325A	Analysis Date:	03/25/11 11:05 AM	Prep Date:	03/25/11

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
pH	7.49	0	0	7.470				0.267	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_110325A

Sample ID:	ICV-110325	Batch ID:	R54113		TestNo:		M4500-H+ B		Units:		pH Units
SampType:	ICV	Run ID:	TITRATOR_110325A		Analysis Date:		03/25/11 11:00 AM		Prep Date:		03/25/11
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:	CCV-110325	Batch ID:	R54113		TestNo:		M4500-H+ B		Units:		pH Units
SampType:	CCV	Run ID:	TITRATOR_110325A		Analysis Date:		03/25/11 11:08 AM		Prep Date:		03/25/11
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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TOC_110328A

Sample ID:	LCS-45622	Batch ID:	45622		TestNo:		M5310C		Units:		mg/L
SampType:	LCS	Run ID:	TOC_110328A		Analysis Date:		03/28/11 10:22 AM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Total Organic Carbon		9.96	1.00	10.00	0	99.6	80	120			

Sample ID:	MB-45622	Batch ID:	45622		TestNo:		M5310C		Units:		mg/L
SampType:	MBLK	Run ID:	TOC_110328A		Analysis Date:		03/28/11 10:52 AM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Total Organic Carbon		<0.300	1.00								

Sample ID:	1103202-02B MS	Batch ID:	45622		TestNo:		M5310C		Units:		mg/L
SampType:	MS	Run ID:	TOC_110328A		Analysis Date:		03/28/11 04:23 PM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Total Organic Carbon		11.3	1.00	10.00	1.493	98.1	80	120			

Sample ID:	1103202-02B MSD	Batch ID:	45622		TestNo:		M5310C		Units:		mg/L
SampType:	MSD	Run ID:	TOC_110328A		Analysis Date:		03/28/11 04:44 PM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Total Organic Carbon		11.3	1.00	10.00	1.493	97.6	80	120	0.433	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TOC_110328A

Sample ID:	ICV-110328	Batch ID:	R54140		TestNo:		M5310C		Units:		mg/L
SampType:	ICV	Run ID:	TOC_110328A		Analysis Date:		03/28/11 10:04 AM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Total Organic Carbon		15.3	1.00	15.00	0	102	90	110			

Sample ID:	CCV-110328	Batch ID:	R54140		TestNo:		M5310C		Units:		mg/L
SampType:	CCV	Run ID:	TOC_110328A		Analysis Date:		03/28/11 05:24 PM		Prep Date:		03/28/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Total Organic Carbon		10.4	1.00	10.00	0	104	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_110325A

Sample ID:	MB-45597	Batch ID:	45597		TestNo:		M3500-Cr D		Units:		mg/L
SampType:	MBLK	Run ID:	UV/VIS_2_110325A		Analysis Date:		03/25/11 10:44 AM		Prep Date:		03/25/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Hexavalent Chromium		<0.00800	0.0100								

Sample ID:	LCS-45597	Batch ID:	45597		TestNo:		M3500-Cr D		Units:		mg/L
SampType:	LCS	Run ID:	UV/VIS_2_110325A		Analysis Date:		03/25/11 10:44 AM		Prep Date:		03/25/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Hexavalent Chromium		0.100	0.0100	0.100	0	100	85	115			

Sample ID:	LCSD-45597	Batch ID:	45597		TestNo:		M3500-Cr D		Units:		mg/L
SampType:	LCSD	Run ID:	UV/VIS_2_110325A		Analysis Date:		03/25/11 10:44 AM		Prep Date:		03/25/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Hexavalent Chromium		0.0993	0.0100	0.100	0	99.3	85	115	0.692	15	

Sample ID:	1103202-02D MS	Batch ID:	45597		TestNo:		M3500-Cr D		Units:		mg/L
SampType:	MS	Run ID:	UV/VIS_2_110325A		Analysis Date:		03/25/11 10:44 AM		Prep Date:		03/25/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Hexavalent Chromium		0.106	0.0100	0.100	0	106	85	115			

Sample ID:	1103202-02D MSD	Batch ID:	45597		TestNo:		M3500-Cr D		Units:		mg/L
SampType:	MSD	Run ID:	UV/VIS_2_110325A		Analysis Date:		03/25/11 10:44 AM		Prep Date:		03/25/11
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Hexavalent Chromium		0.104	0.0100	0.100	0	104	85	115	2.27	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: 1103202
Project: HELSTF Chromate Spill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_110325A

Sample ID:	ICV-110325	Batch ID:	R54108		TestNo:		M3500-Cr D		Units:		mg/L
SampType:	ICV	Run ID:	UV/VIS_2_110325A		Analysis Date:		03/25/11 10:44 AM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Hexavalent Chromium		0.101	0.0100	0.100	0	101	90	110			

Sample ID:	CCV1-110325	Batch ID:	R54108		TestNo:		M3500-Cr D		Units:		mg/L
SampType:	CCV	Run ID:	UV/VIS_2_110325A		Analysis Date:		03/25/11 10:44 AM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Hexavalent Chromium		0.203	0.0100	0.200	0	102	90	110			

Sample ID:	CCV2-110325	Batch ID:	R54108		TestNo:		M3500-Cr D		Units:		mg/L
SampType:	CCV	Run ID:	UV/VIS_2_110325A		Analysis Date:		03/25/11 10:44 AM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Hexavalent Chromium		0.203	0.0100	0.200	0	102	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: 04/06/11

Lab Order: 1103202
Client: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater

Sequence Report

Run ID: GC15_110329A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV-110329	-----	M8015D	R54189	1	03/29/11 09:10 AM	
LCS-45599	-----	M8015D	45599	1	03/29/11 09:21 AM	03/25/11
1103202-02EMS	HLSF-0143-HMW-040-0311MS	M8015D	45599	1	03/29/11 09:30 AM	03/25/11
1103202-02EMSD	HLSF-0143-HMW-040-0311MSD	M8015D	45599	1	03/29/11 09:39 AM	03/25/11
MB-45599	-----	M8015D	45599	1	03/29/11 09:57 AM	03/25/11
1103202-01E	HLSF-0143-HMW-039-0311	M8015D	45599	1	03/29/11 10:15 AM	03/25/11
1103202-02E	HLSF-0143-HMW-040-0311	M8015D	45599	1	03/29/11 10:24 AM	03/25/11
1103202-04E	HLSF-0143-HMW-041-0311	M8015D	45599	1	03/29/11 10:33 AM	03/25/11
CCV1-110329	-----	M8015D	R54189	1	03/29/11 11:00 AM	

DHL Analytical

Date: 04/06/11

Lab Order: 1103202
Client: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater

Sequence Report

Run ID: GCMS5_110404A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV-110404	-----	SW8260C	R54259	1	04/04/11 09:19 AM	
LCS-45723	-----	SW8260C	45723	1	04/04/11 09:44 AM	04/01/11
MB-45723	-----	SW8260C	45723	1	04/04/11 10:35 AM	04/04/11
1103202-02A	HLSF-0143-HMW-040-0311	SW8260C	45723	1	04/04/11 11:00 AM	04/04/11
1103202-01A	HLSF-0143-HMW-039-0311	SW8260C	45723	1	04/04/11 12:13 PM	04/04/11
1103202-04A	HLSF-0143-HMW-041-0311	SW8260C	45723	1	04/04/11 12:39 PM	04/04/11
1103202-02AMS	HLSF-0143-HMW-040-0311MS	SW8260C	45723	1	04/04/11 01:03 PM	04/04/11
1103202-02AMSD	HLSF-0143-HMW-040-0311MSD	SW8260C	45723	1	04/04/11 01:27 PM	04/04/11
1103202-03A	HLSF-0143-TB-359-0311	SW8260C	45723	1	04/04/11 03:31 PM	04/04/11

DHL Analytical

Date: 04/06/11

Lab Order: 1103202
Client: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater

Sequence Report

Run ID: ICP-MS3_110330A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV1-110330	-----	SW6020	R54200	1	03/30/11 11:32 AM	
ICB1-110330	-----	SW6020	R54200	1	03/30/11 11:43 AM	
CCB1-110330	-----	SW6020	R54200	1	03/30/11 01:22 PM	
CCV2-110330	-----	SW6020	R54200	1	03/30/11 02:23 PM	
CCB2-110330	-----	SW6020	R54200	1	03/30/11 02:39 PM	
MB-45619	-----	SW6020	45619	1	03/30/11 02:46 PM	03/28/11
LCS-45619	-----	SW6020	45619	1	03/30/11 02:51 PM	03/28/11
LCSD-45619	-----	SW6020	45619	1	03/30/11 02:57 PM	03/28/11
1103202-02C	HLSF-0143-HMW-040-0311	SW6020	45619	1	03/30/11 03:08 PM	03/28/11
1103202-02C SD	HLSF-0143-HMW-040-0311	SW6020	45619	5	03/30/11 03:13 PM	03/28/11
1103202-01C	HLSF-0143-HMW-039-0311	SW6020	45619	1	03/30/11 03:30 PM	03/28/11
1103202-04C	HLSF-0143-HMW-041-0311	SW6020	45619	1	03/30/11 03:35 PM	03/28/11
1103202-02C PDS	HLSF-0143-HMW-040-0311	SW6020	45619	1	03/30/11 03:41 PM	03/28/11
1103202-02C MS	HLSF-0143-HMW-040-0311MS	SW6020	45619	1	03/30/11 03:46 PM	03/28/11
1103202-02C MSD	HLSF-0143-HMW-040-0311MSD	SW6020	45619	1	03/30/11 03:52 PM	03/28/11
CCV3-110330	-----	SW6020	R54200	1	03/30/11 03:57 PM	
CCB3-110330	-----	SW6020	R54200	1	03/30/11 04:14 PM	

DHL Analytical

Date: 04/06/11

Lab Order: 1103202
Client: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater

Sequence Report

Run ID: TITRATOR_110325A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV2-110325	-----	M4500-H+ B	R54113	1	03/25/11 10:58 AM	03/25/11
ICV1-110325	-----	M4500-H+ B	R54113	1	03/25/11 10:59 AM	03/25/11
ICV-110325	-----	M4500-H+ B	R54113	1	03/25/11 11:00 AM	03/25/11
1103202-01D	HLSF-0143-HMW-039-0311	M4500-H+ B	45607	1	03/25/11 11:03 AM	03/25/11
1103202-02D	HLSF-0143-HMW-040-0311	M4500-H+ B	45607	1	03/25/11 11:04 AM	03/25/11
1103202-02D DUP	HLSF-0143-HMW-040-0311PD9	M4500-H+ B	45607	1	03/25/11 11:05 AM	03/25/11
1103202-04D	HLSF-0143-HMW-041-0311	M4500-H+ B	45607	1	03/25/11 11:07 AM	03/25/11
CCV-110325	-----	M4500-H+ B	R54113	1	03/25/11 11:08 AM	03/25/11

DHL Analytical

Date: 04/06/11

Lab Order: 1103202
Client: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater

Sequence Report

Run ID: TOC_110328A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV-110328	-----	M5310C	R54140	1	03/28/11 10:04 AM	03/28/11
LCS-45622	-----	M5310C	45622	1	03/28/11 10:22 AM	03/28/11
MB-45622	-----	M5310C	45622	1	03/28/11 10:52 AM	03/28/11
1103202-01B	HLSF-0143-HMW-039-0311	M5310C	45622	1	03/28/11 03:23 PM	03/28/11
1103202-02B	HLSF-0143-HMW-040-0311	M5310C	45622	1	03/28/11 04:02 PM	03/28/11
1103202-02B MS	HLSF-0143-HMW-040-0311MS	M5310C	45622	1	03/28/11 04:23 PM	03/28/11
1103202-02B MSD	HLSF-0143-HMW-040-0311MSD	M5310C	45622	1	03/28/11 04:44 PM	03/28/11
1103202-04B	HLSF-0143-HMW-041-0311	M5310C	45622	1	03/28/11 05:06 PM	03/28/11
CCV-110328	-----	M5310C	R54140	1	03/28/11 05:24 PM	03/28/11

DHL Analytical

Date: 04/06/11

Lab Order: 1103202
Client: Zia Engineering & Environmental
Project: HELSTF Chromate Spill Groundwater

Sequence Report

Run ID: UV/VIS_2_110325A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date
ICV-110325	-----	M3500-Cr D	R54108	1	03/25/11 10:44 AM	
MB-45597	-----	M3500-Cr D	45597	1	03/25/11 10:44 AM	03/25/11
LCS-45597	-----	M3500-Cr D	45597	1	03/25/11 10:44 AM	03/25/11
LCSD-45597	-----	M3500-Cr D	45597	1	03/25/11 10:44 AM	03/25/11
1103202-02D	HLSF-0143-HMW-040-0311	M3500-Cr D	45597	1	03/25/11 10:44 AM	03/25/11
1103202-02D MS	HLSF-0143-HMW-040-0311MS	M3500-Cr D	45597	1	03/25/11 10:44 AM	03/25/11
1103202-02D MSD	HLSF-0143-HMW-040-0311MSD	M3500-Cr D	45597	1	03/25/11 10:44 AM	03/25/11
1103202-01D	HLSF-0143-HMW-039-0311	M3500-Cr D	45597	1	03/25/11 10:44 AM	03/25/11
CCV1-110325	-----	M3500-Cr D	R54108	1	03/25/11 10:44 AM	
1103202-04D	HLSF-0143-HMW-041-0311	M3500-Cr D	45597	5	03/25/11 10:44 AM	03/25/11
CCV2-110325	-----	M3500-Cr D	R54108	1	03/25/11 10:44 AM	