April 05, 2010

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: 1003170

RE: HELSTF Construction Landfill Groundwater

Dear Brad Davis:

DHL Analytical received 8 sample(s) on 3/23/2010 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 Laboratory Certification Number: T104704211-09-1

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575-532-1526 p
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203

#103170

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NO.

PROJECT NAME: HELSTF Construction Landfill Groundwater

SAMPLER'S SIGNATURE

	DATE	TIME	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC 8260	GRO 8015	TOC	SVOC 8270	DRO 8015	RCRA Met./Cat.	SO4, Cl, Alk, pH	Diss Metals			REMARKS
01	3-19-10	1220	HLSF-3839-HMW1-035-0310	WATER		16	X	X	X	X	X	X	X	X			
02	3-19-10	1220	HLSF-3839-TB-203-0310	WATER		2	X										
03	3-19-10	1016	HLSF-3839-HMW-032-0310	WATER		3	X										
04	3-22-10	1023	HLSF-3839-HMW-033-0310	WATER		3	X										
05	3-22-10	1023	HLSF-3839-HMW-133-0310	WATER		3	X										
06	3-22-10	1245	HLSF-3839-RB-002-0310	WATER		3	X										
07	3-19-10	1233	HLSF-3839-HMW-029-0310	WATER		3	X										
08	3-19-10	1010	HLSF-3839-HMW034-0310	WATER		3	X										

PROJECT INFORMATION	SAMPLES RECEIVED		1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LAB: (SIGNATURE)
PROJECT MANAGER: Brad Davis	TOTAL NO. OF CONTAINERS		(PRINTED NAME) GABRIEL GALITA	(PRINTED NAME) Fed ex	(PRINTED NAME)
SHIPPING ID NO.	CHAIN OF CUSTODY SEALS	intact	RECEIVED BY: (SIGNATURE) Fed ex	RECEIVED BY: (SIGNATURE)	(COMPANY)
	GOOD CONDITION/CHILLED	3.9	(TIME/DATE) 3/22/10	(TIME/DATE) 3/23/10 9:00	(TIME/DATE)
VIA: FED EX ~~LONE STAR~~	CONFORMS TO RECORD		SPECIAL INSTRUCTIONS / COMMENTS: PLEASE SEE ATTACHED ANALYTE LIST FOR DETAILS		

PLEASE USE BALL POINT PEN

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CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NO.	PROJECT NAME: HELSTF Construction Landfill Groundwater
SAMPLER'S SIGNATURE	Juan Padilla

	DATE	TIME	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	~~VOC 8260~~	GRO 8015	TOC	SVOC 8270	DRO 8015	RCRA Met./Cat.	SO4, Cl, Alk, pH	DISS. METALS			REMARKS
03	3-19-10	1016	HLSF-3839-HMW-032-0310	WATER		13	X	X	X	X	X	X	X	X			

PROJECT INFORMATION	SAMPLES RECEIVED	1	1. RELINQUISHED BY: (SIGNATURE) Juan Padilla	2. RELINQUISHED BY: (SIGNATURE) Fed Ex	3. RECEIVED BY LAB: (SIGNATURE)
PROJECT MANAGER: Brad Davis	TOTAL NO. OF CONTAINERS	13	(PRINTED NAME) Juan Padilla	(PRINTED NAME) Fed Ex	(PRINTED NAME)
SHIPPING ID NO.	CHAIN OF CUSTODY SEALS	intact	RECEIVED BY: (SIGNATURE) Fed Ex	RECEIVED BY: (SIGNATURE) [illegible]	(COMPANY)
	GOOD CONDITION/COLD	2/4	(TIME/DATE) 3/22/10	(TIME/DATE) 3/23/10 9:00	(TIME/DATE)
VIA: Fed Ex ~~Lo SP~~	CONFORMS TO RECORD		SPECIAL INSTRUCTIONS / COMMENTS: PLEASE SEE ATTACHED ANALYTE LIST FOR DETAILS		

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CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NO.

PROJECT NAME: HELSTF Construction Landfill Groundwater

SAMPLER'S SIGNATURE: Juan Padilla

DATE	TIME	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	~~VOC 8260~~ J.P.	GRO 8015	TOC	SVOC 8270	DRO 8015	RCRA Met./Cat.	SO4,Cl,Alk,pH	DISS METALS			REMARKS
3-22-10	1023	HLSF-3839-HMW-033-0310	WATER		13	X	X	X	X	X	X	X	X			

ANALYSIS REQUESTED

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LAB: (SIGNATURE)
PROJECT MANAGER: Brad Davis	SAMPLES RECEIVED	1	Juan Padilla	Fed ex	(PRINTED NAME)
SHIPPING ID NO.	TOTAL NO. OF CONTAINERS	13	(PRINTED NAME) Juan. Padilla	(PRINTED NAME) Fed ex	(COMPANY)
	CHAIN OF CUSTODY SEALS	intact	RECEIVED BY: (SIGNATURE) Fed ex	RECEIVED BY: (SIGNATURE)	(TIME/DATE)
	GOOD CONDITION/CHILLED	3.3°	(TIME/DATE) 3/22/10	(TIME/DATE) 3/23/10 9:00	
VIA: ~~Lone Star~~ Red EX J.P.	CONFORMS TO RECORD		SPECIAL INSTRUCTIONS / COMMENTS: PLEASE SEE ATTACHED ANALYTE LIST FOR DETAILS		

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CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NO.

PROJECT NAME: HELSTF Construction Landfill Groundwater

SAMPLER'S SIGNATURE: Juan Padilla

DATE	TIME	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	~~VOC 8260~~ J.P.	GRO 8015	TOC	SVOC 8270	DRO 8015	RCRA Met./Cat.	SO4, Cl, Alk, pH	DISS METALS			REMARKS
3-22-10	1023	HLSF-3839-HMW-133-0310	WATER		13	X	X	X	X	X	X	X	X			

PROJECT INFORMATION

PROJECT MANAGER: Brad Davis

SHIPPING ID NO.

VIA: J.P. ~~Lone Star~~ Fed Ex

SAMPLES RECEIVED	1
TOTAL NO. OF CONTAINERS	13
CHAIN OF CUSTODY SEALS	intact
GOOD CONDITION/CHILLED	3.5
CONFORMS TO RECORD	

1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LAB: (SIGNATURE)
Juan Padilla	Fed ex	
(PRINTED NAME) Juan Padilla	(PRINTED NAME) Fed ex	(PRINTED NAME)
RECEIVED BY: (SIGNATURE) Fed ex	RECEIVED BY: (SIGNATURE) [illegible]	(COMPANY)
(TIME/DATE) 3/22/10	(TIME/DATE) 3/23/10 9:00	(TIME/DATE)

SPECIAL INSTRUCTIONS / COMMENTS:
PLEASE SEE ATTACHED ANALYTE LIST FOR DETAILS

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232

CHAIN OF CUSTODY RECORD

PROJECT NO.

PROJECT NAME: HELSTF Construction Landfill Groundwater

SAMPLER'S SIGNATURE: Juan Padilla

DATE	TIME	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC 8260	GRO 8015	TOC	SVOC 8270	DRO 8015	RCRA Met./Cat.	SO4,Cl,Alk,pH	Diss. Metals			REMARKS
3-22-10	1245	HLSF-3839-RB-001-0310	Water		13	X	X	X	X	X	X	X	X			

ANALYSIS REQUESTED

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LAB: (SIGNATURE)
PROJECT MANAGER: Bradley Davis	SAMPLES RECEIVED	1	Juan Padilla	Ted [illegible]	
	TOTAL NO. OF CONTAINERS	13	(PRINTED NAME) Juan Padilla	(PRINTED NAME) Ted [illegible]	(PRINTED NAME)
SHIPPING ID NO.	CHAIN OF CUSTODY SEALS	intact	RECEIVED BY: (SIGNATURE) Ted [illegible]	RECEIVED BY: (SIGNATURE) [illegible]	(COMPANY)
	GOOD CONDITION/CHILLED	2.5	(TIME/DATE) 3/22/10	(TIME/DATE) 3/23/10 9:00	(TIME/DATE)
VIA: Lone Star Fed Ex	CONFORMS TO RECORD		SPECIAL INSTRUCTIONS / COMMENTS: PLEASE SEE ATTACHED ANALYTE LIST FOR DETAILS		

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198 #(002370)

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NO.

PROJECT NAME: HELSTF Construction Landfill Groundwater

SAMPLER'S SIGNATURE: Juan Padilla

DATE	TIME	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC 8260	GRO 8015	TOC	SVOC 8270	DRO 8015	RCRA Met./Cat.	SO4, Cl, Alk, pH	DISS METALS			REMARKS
3-19-10	1233	HLSF-3839-HMW-029-0310	WATER		13	X	X	X	X	X	X	X	X			

PROJECT INFORMATION

PROJECT MANAGER: Brad Davis

SHIPPING ID NO.

VIA: Fed EX

SAMPLES RECEIVED	1
TOTAL NO. OF CONTAINERS	13
CHAIN OF CUSTODY SEALS	intact
GOOD CONDITION/CHILLED	3.5
CONFORMS TO RECORD	

1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LAB: (SIGNATURE)
Juan Padilla	Fed ex	
(PRINTED NAME) Juan Padilla	(PRINTED NAME) Fed ex	(PRINTED NAME)
RECEIVED BY: (SIGNATURE) Fed ex	RECEIVED BY: (SIGNATURE) [illegible]	(COMPANY)
(TIME/DATE) 3/22/10	(TIME/DATE) 3/23/10 9:00	(TIME/DATE)

SPECIAL INSTRUCTIONS / COMMENTS:
PLEASE SEE ATTACHED ANALYTE LIST FOR DETAILS

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CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NO.

PROJECT NAME: HELSTF Construction Landfill Groundwater

SAMPLER'S SIGNATURE

DATE	TIME	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	~~VOC 8260~~	GRO 8015	TOC	SVOC 8270	DRO 8015	RCRA Met./Cat.	SO4,Cl,Alk,pH	DISS METALS			REMARKS
3-19-10	1010	HLSF-3839-HMW-034-0310	WATER		13	X	X	X	X	X	X	X	X			

ANALYSIS REQUESTED

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LAB: (SIGNATURE)
PROJECT MANAGER: Brad Davis	SAMPLES RECEIVED	1	(PRINTED NAME)	(PRINTED NAME) Fed ex	(PRINTED NAME)
SHIPPING ID NO.	TOTAL NO. OF CONTAINERS	13	RECEIVED BY: (SIGNATURE) Fed ex	RECEIVED BY: (SIGNATURE)	(COMPANY)
VIA: J.P. Fed EX ~~LONE STAR~~	CHAIN OF CUSTODY SEALS	intact	(TIME/DATE) 3/22/10	(TIME/DATE) 3/23/10 9:00	(TIME/DATE)
	GOOD CONDITION/CHILLED	2-8	SPECIAL INSTRUCTIONS/COMMENTS: PLEASE SEE ATTACHED ANALYTE LIST FOR DETAILS		
	CONFORMS TO RECORD				

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From: Origin ID: LRUA (575) 532-1526
Tara Parra
Zia EEC
755 S. Telshor Blvd.

Las Cruces, NM 88011

FedEx Express

J1809080222202224

Ship Date: 22MAR10
ActWgt: 65.0 LB
CAD: 100557518/INET3010

Delivery Address Bar Code

Ref # LCS-09-015
Invoice #
PO # BG 0020
Dept #

SHIP TO: (512) 388-8222 BILL SENDER
John Dupont
DHL Analytical
2300 DOUBLE CREEK DR

ROUND ROCK, TX 78664

TRK# 0201 7933 7656 6990

TUE - 23 MAR A1
PRIORITY OVERNIGHT

78664
TX-US
AUS

XH BSMA

685G1F653SFE8

CUSTODY SEAL
DATE 3-22-10
SIGNATURE

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

From: Origin ID: LRUA (575) 532-1526
Tara Parra
Zia EEC
755 S. Telshor Blvd.

Las Cruces, NM 88011

FedEx Express

J10101B22280206

Ship Date: 22MAR10
ActWgt: 65.0 LB
CAD: 100557518/INET3010

Delivery Address Bar Code

Ref # LCS-09-015
Invoice #
PO # BG 0020
Dept #

SHIP TO: (512) 388-8222 BILL SENDER
John Dupont
DHL Analytical
2300 DOUBLE CREEK DR

ROUND ROCK, TX 78664

TRK# 0201 7933 7655 8866

TUE - 23 MAR A1
PRIORITY OVERNIGHT

78664
TX-US
AUS

XH BSMA

66GG6/6G3/XFEB

CUSTODY SEAL
DATE 3-22-10
SIGNATURE

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

From: Origin ID: LRUA (575) 532-1526
Tara Parra
Zia EEC
755 S. Telshor Blvd.

Las Cruces, NM 88011

FedEx Express

J1614161822280224

Ship Date: 22MAR10
ActWgt: 65.0 LB
CAD: 100557518/INET3010

Delivery Address Bar Code

Ref # LCS-09-015
Invoice #
PO # BG 0020
Dept #

SHIP TO: (512) 388-8222 BILL SENDER

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DHL Analytical
2300 DOUBLE CREEK DR

ROUND ROCK, TX 78664

TRK# 0201 7984 9717 9145

TUE - 23 MAR A1
PRIORITY OVERNIGHT

78664
TX-US
AUS

XH BSMA

535G1/F653/5FE8

CUSTODY SEAL
DATE 3-22-10
SIGNATURE

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

From: Origin ID: LRUA (575) 532-1526
Tara Parra
Zia EEC
755 S. Telshor Blvd.

Las Cruces, NM 88011

FedEx Express

Ship Date: 22MAR10
ActWgt: 65.0 LB
CAD: 100557518/INET3010

Delivery Address Bar Code

Ref # LCS-09-015
Invoice #
PO # BG 0020
Dept #

SHIP TO: (512) 388-8222 BILL SENDER
John Dupont
DHL Analytical
2300 DOUBLE CREEK DR

ROUND ROCK, TX 78664

TRK# 0201 7933 7657 3914

TUE - 23 MAR A1
PRIORITY OVERNIGHT

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TX-US
AUS

XH BSMA

CUSTODY SEAL
DATE 3-22-10
SIGNATURE

QEC
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From: Origin ID: LRUA (575) 532-1526
Tara Parra
Zia EEC
755 S. Telshor Blvd.

Las Cruces, NM 88011

FedEx Express

Ship Date: 22MAR10
ActWgt: 65.0 LB
CAD: 100557518/INET3010

Delivery Address Bar Code

Ref # LCS-09-015
Invoice #
PO # BG 0020
Dept #

SHIP TO: (512) 388-8222 BILL SENDER

John Dupont
DHL Analytical
2300 DOUBLE CREEK DR

ROUND ROCK, TX 78664

TRK# 0201 7933 7657 6968

TUE - 23 MAR A1
PRIORITY OVERNIGHT

78664
TX-US
AUS

XH BSMA

CUSTODY SEAL
DATE 3-22-10
SIGNATURE

QEC
Quality Environmental Containers
800-255-3950 • 304-255-4900

From: Origin ID: LRUA (575) 532-1526
Tara Parra
Zia EEC
755 S. Telshor Blvd.

Las Cruces, NM 88011

FedEx Express

J1050802220224

Ship Date: 22MAR10
ActWgt: 65.0 LB
CAD: 100557518/INET3010

Delivery Address Bar Code

Ref # LCS-09-015
Invoice #
PO # BG 0020
Dept #

SHIP TO: (512) 388-8222 BILL SENDER

John Dupont
DHL Analytical
2300 DOUBLE CREEK DR

ROUND ROCK, TX 78664

TRK# 0201 7933 7657 0580

TUE - 23 MAR A1
PRIORITY OVERNIGHT

78664
TX-US
AUS

XH BSMA

505G46953AFE8

CUSTODY SEAL
DATE
SIGNATURE

-02-10
2022

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

From: Origin ID: LRUA (575) 532-1526
Tara Parra
Zia EEC
755 S. Telshor Blvd.

Las Cruces, NM 88011

FedEx Express

J1910100222024

Ship Date: 22MAR10
ActWgt: 65.0 LB
CAD: 100557518/INET3010

Delivery Address Bar Code

Ref # LCS-09-015
Invoice #
PO # BG 0020
Dept #

SHIP TO: (512) 388-8222 BILL SENDER
John Dupont
DHL Analytical
2300 DOUBLE CREEK DR

ROUND ROCK, TX 78664

TRK# 0201 7933 7658 0239

TUE - 23 MAR A1
PRIORITY OVERNIGHT

78664
TX-US
AUS

XH BSMA

585G1/F663/FE8

CUSTODY SEAL
DATE 3-22-10
SIGNATURE

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

DHL Analytical

Sample Receipt Checklist

Client Name **Zia Engineering & Environmental** Date Received: **3/23/2010**

Work Order Number **1003170** Received by **JB**

Checklist completed by: [signature] 3/23/10 (Signature / Date) Reviewed by SS 3-23-10 (Initials / Date)

Carrier name: FedEx 1day

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 ☐	3.9 °C, 2.4°, 3.3°, 3.5°, 2.5°, 3.5°, 2.8°
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 [initials]

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

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

04/05/10
Date

DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: HELSTF Construction Landfill Groundwater	Date: 4/5/2010
Reviewer Name: Angie O'Donnell	Laboratory Work Order: 1003170
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			R4-02
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			R7-04
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 Construction Landfill Groundwater	Date: 4/5/2010
Reviewer Name: Angie O'Donnell	Laboratory Work Order: 1003170

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Was the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICAL data available for all instruments used?	X				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB):**					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences for each analyte within the method-required QC limits?		X			S2-02
		3) Was the ICAL curve verified for each analyte?	X				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass Spectral Tuning:**					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal Standards (IS):**					
		1) Were IS area counts and retention times within the method-required QC limits?		X			S4-01
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				S5-02
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			S9-01
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				

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).

Manual Integrations Tracking Form - DoD QSM 4.1 Requirement

Instrument ID: GCMS4

DATA Folder: GCMS#4-100331A

Sample ID ICV, QC and Field Samples	Analyte #1 Identification & Reason	Analyte #2 Identification & Reason	Analyte #3 Identification & Reason	Analyte #4 Identification & Reason
LCS-40157	MI for benzoic acid because the wrong peak was integrated.			
1003170-06G-MS	MI for benzoic acid because the wrong peak was integrated.			
1003170-06G-MSD	MI for benzoic acid because the wrong peak was integrated.			

*Manually Integrated = MI

D.O
Analyst

4/1/10
Date

2nd Level Review

4-1-2010
Date

Manual IntegrationsGCMSDATA2

Manual Integrations Tracking Form - DoD QSM 4.1 Requirement

Instrument ID: GCMS4 **Calibration Folder:** GCMS#4-SV100317 CAL.

Sample ID	Analyte #1 Identification & Reason	Analyte #2 Identification & Reason	Analyte #3 Identification & Reason	Analyte #4 Identification & Reason
CAL 1 0.04 ppm	N/A			
CAL 2 0.2 ppm	N/A.			
CAL 3 0.5 ppm	N/A.			
CAL 4 1.0 ppm	M.I for benzoic acid because wrong peak was integrated.			
CAL 5 2.0 ppm	M.I for benzoic acid because wrong peak was integrated.			
CAL 6 3.0 ppm	M.I for benzoic acid because wrong peak was integrated.			
CAL 7 4.0 ppm	M.I for benzoic acid because wrong peak was integrated.			
CAL 8 5.0 ppm	M.I for benzoic acid because wrong peak was integrated.			
SSCV 2.0 ppm				

*Manually Integrated = MI

PD 2/20/10
Analyst Date

[illegible] 3/23/10
2nd Level Review Date

Manual IntegrationsGCMSCAL

Manual Integrations Tracking Form - DoD QSM 4.1 Requirement

Instrument ID: GCMS5

ICAL Folder: GCMS5_100310W.CAL

Sample ID ICAL, ICV, and CCV QC and Field Samples	Analyte #1 Identification & Reason	Analyte #2 Identification & Reason	Analyte #3 Identification & Reason	Analyte #4 Identification & Reason
	1,4-Dichlorobenzene	Chloroethane		
ICAL 2 (0.928 PPB)	1,4-Dichlorobenzene peak misidentified as 1,3-Dichlorobenzene.			

Analyst Date 3-11-10 Date 03/18/10

DHL Analytical **Date:** *05-Apr-10*

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Lab Order: 1003170

CASE NARRATIVE

This case narrative describes abnormalities and deviations that may affect the results and summarizes all known issues that need to be highlighted for the data user to assess the results. This case narrative and the report contents are compliant with DoD QSM Ver 4.1 and NELAC.

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

Method SW6020 - Metals Analysis (total & dissolved)
Method SW7470A - Mercury Analysis (total & dissolved)
Method M8015D - DRO Analysis
Method M8015V - GRO Analysis
Method SW8270C - Semivolatile Organics (The compounds 1-Methylnaphthalene, 1-Chloronaphthalene, Dibenz(a,j)acridine and p,Dimethylamineoazobenzene are not NELAC Certified)
Method SW8260B - Volatile Organics
Method E300 - Anions Analysis
Method M5310C (18th Edition) - TOC Analysis
Method M4500-H+ B (18th Edition) - pH of a Water
Method M2320 B (18th Edition) - Alkalinity Analysis

Exception Report R1-01

Samples were received on and log-in performed on 03/23/2010 A total of 8 samples were received and all were analyzed . The samples arrived in good condition and were properly packaged.

Exception Report R4-02

For TPH-DRO Analysis, the recovery of surrogate Isopropylbenzene for all of the Samples 1003170-01, -03, -04, -05 and -08, the Laboratory Control Spike (LCS-40143), the Method Blank (MB-40143), the Matrix Spike and Matrix Spike Duplicate (1003170-06 MS/MSD) were slightly below the method control limits. These are flagged accordingly in the Analytical Data Report and QC Summary Report. The remaining surrogate for each sample was within acceptable control limits. No further corrective action was taken.

For Semivolatiles Analysis, the recovery of Surrogates 2-Fluorobiphenyl and 2,4,6-Tribromophenol for Samples 1003170-03, -04 and -05 were below the method control limits. This is flagged in the Analytical Data Report. The remaining surrogates for these samples were within the acceptable control limits. No further corrective action was taken.

Exception Report R6-04

For Semivolatiles Analysis, the recovery of Dimethylphenethylamine in the Laboratory Control Spike (LCS2-40157) was below the method control limits. This is flagged in the enclosed QC Summary Report. This compound is within acceptable control limits in the associated ICV. No further corrective action was taken.

Exception Report R7-03 and -04

For Trace and Dissolved Metals Analysis (Batches 40148 and 40153), the recoveries of several analytes in the Matrix Spike and Matrix Spike Duplicate (1003170-07 MS/MSD) were outside of the method control limits. These are flagged accordingly in the enclosed QC Summary Report. These analytes are within acceptable control limits in the associated LCS's. The reference samples selected for both MS/MSD's are from this workorder.

For Volatiles Analysis, the recovery of 2-Chloroethylvinylether in the Matrix Spike and Matrix Spike Duplicate (1003170-01 MS/MSD) was outside of the method control limits. This has been flagged accordingly in the enclosed QC Summary Report. The associated LCS was within the acceptable method limits for this compound. The reference sample selected for the MS/MSD was from this workorder. No further corrective action was taken.

For Semivolatiles Analysis, the recoveries of a few compounds in the Matrix Spike and Matrix Spike Duplicate (1003170-06 MS/MSD) were outside of the method control limits. Additionally, the RPD of Benzidine in the Matrix Spike Duplicate was above the method control limit. These are flagged accordingly in the enclosed QC Summary Report. These compounds are within acceptable control limits in either the associated ICV and/or LCS. No further corrective action was taken.

Exception Report R10-01

The Dissolved Metals Analysis/Trace Metals Analysis, the result of Dissolved Selenium for Samples HLSF-3839-HMW-033-0310 and HLSF-3839-HMW-133-0310 were higher than the result of Total Selenium. The results were outside of the acceptable analytical variation limits, but were confirmed by reanalysis.

For Trace Metals, for Sample HLSF-3839-HMW-133-0310, Lead was reported from the 5X dilution, the response of internal standard in the 1X dilution was outside of the method control limits.

Exception Report S2-02

For Volatiles Analysis, the recovery of 2,2-Dichloropropane in the ICV (ICV2-100325) was marginally above the method control limits. This is flagged in the QC Summary Report. The associated LCS was within acceptable control limits. No further corrective action was taken.

For Semivolatiles Analysis, the recovery of Benzidine for the Initial Calibration Verification (ICV-100331) was below the control limits. This is flagged in the QC Summary Report. The associated LCS was within acceptable control limits for this compound. No further corrective action was taken.

Exception Report S4-01

For Dissolved Metals Analysis, the response of Internal Standard Scandium and Germanium in the Serial Dilution (1003170-07 SD) was above the method control limits. All of the affected analytes were within the acceptable control limits except Selenium, the RPD of Selenium was marginally above the method control limit. No further corrective action was taken.

Additionally, the response of Internal Standard Scandium and/or Germanium in the CCVerification and the CCBlank (CCV2/CCB2-100329, CCV5/CCB5-100329, CCV-100330) was above the method control limits. The recoveries of the affected analytes were within control limits. No further corrective action was taken.

Exception Report S5-02

For Semivolatiles and Volatiles Analysis, some samples and/or standards were manually integrated. Please refer to the table on page 21-23 of this report for the full list of samples, standards, and the compounds that were manually integrated.

Exception Report S9-01

For Metals Analysis, (Batch-40153) the recovery of Sodium in the Post Digestion Spike (1003170-07 PDS) was slightly above the method control limits. Sodium was within control limits in the associated Serial Dilution. Additionally, for Batches 40148 and 40153, the RPD of Selenium in the Serial Dilution (1003170-07 SD) was slightly above the control limit. Selenium was within the acceptable control limits in the associated PDS. The reference sample selected for the QC was from this workorder. No further corrective action was 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 3/2/10. Kit sent on 3/4/10 via Lonestar Overnight, arrive on 3/8/10. This sample delivery group arrived at DHL Analytical 3/23/10. Sample summary sent via email from Log-in to client on 3/23/10 and is kept with the workorder folder. All hardcopies for the sample kit request, bill of lading for sample kit sent are kept in the project folder of WO # 1003088.

DHL Analytical

Date: 04/05/10

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Lab Order: 1003170

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recv'd
1003170-01	HLSF-3839-HMW-035-0310		03/19/10 12:20 PM	03/23/10
1003170-02	HLSF-3839-TB-203-0310		03/19/10 12:20 PM	03/23/10
1003170-03	HLSF-3839-HMW-032-0310		03/19/10 10:16 AM	03/23/10
1003170-04	HLSF-3839-HMW-033-0310		03/22/10 10:23 AM	03/23/10
1003170-05	HLSF-3839-HMW-133-0310		03/22/10 10:23 AM	03/23/10
1003170-06	HLSF-3839-RB-001-0310		03/22/10 12:45 PM	03/23/10
1003170-07	HLSF-3839-HMW-029-0310		03/19/10 12:33 PM	03/23/10
1003170-08	HLSF-3839-HMW-034-0310		03/19/10 10:10 AM	03/23/10

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Lab Order: 1003170

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1003170-01A	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW5030B	Purge and Trap Water GC/MS	03/25/10 09:34 AM	40178
1003170-01B	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW5030B	Purge and Trap Water GC-Gas	03/23/10 02:39 PM	40142
1003170-01C	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	M5310C	TOC prep Aqueous	03/23/10 09:38 AM	40135
1003170-01D	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:48 AM	40155
	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
1003170-01E	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:50 AM	40156
	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
1003170-01F	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	E300	Anion Preparation	03/23/10 08:30 AM	40144
	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	M2320 B	Alkalinity Preparation	03/23/10 12:30 PM	40145
	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	M4500-H+ B	pH Preparation	03/23/10 11:00 AM	40138
1003170-01G	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
1003170-01H	HLSF-3839-HMW-035-0310	03/19/10 12:20 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/23/10 02:42 PM	40143
1003170-02A	HLSF-3839-TB-203-0310	03/19/10 12:20 PM	Trip Blank	SW5030B	Purge and Trap Water GC/MS	03/25/10 09:34 AM	40178
1003170-03A	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW5030B	Purge and Trap Water GC/MS	03/25/10 09:34 AM	40178
1003170-03B	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW5030B	Purge and Trap Water GC-Gas	03/23/10 02:39 PM	40142
1003170-03C	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	M5310C	TOC prep Aqueous	03/23/10 09:38 AM	40135
1003170-03D	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:48 AM	40155
	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
1003170-03E	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:50 AM	40156
	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
1003170-03F	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	E300	Anion Preparation	03/23/10 08:30 AM	40144
	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	M2320 B	Alkalinity Preparation	03/23/10 12:30 PM	40145
	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	M4500-H+ B	pH Preparation	03/23/10 11:00 AM	40138
1003170-03G	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
1003170-03H	HLSF-3839-HMW-032-0310	03/19/10 10:16 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/23/10 02:42 PM	40143

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Lab Order: 1003170

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1003170-04A	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW5030B	Purge and Trap Water GC/MS	03/25/10 09:34 AM	40178
1003170-04B	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW5030B	Purge and Trap Water GC-Gas	03/23/10 02:39 PM	40142
1003170-04C	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	M5310C	TOC prep Aqueous	03/23/10 09:38 AM	40135
1003170-04D	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:48 AM	40155
	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
1003170-04E	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:50 AM	40156
	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
1003170-04F	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	E300	Anion Preparation	03/23/10 08:30 AM	40144
	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	E300	Anion Preparation	03/23/10 08:30 AM	40144
	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	M2320 B	Alkalinity Preparation	03/23/10 12:30 PM	40145
	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	M4500-H+ B	pH Preparation	03/23/10 11:00 AM	40138
1003170-04G	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
1003170-04H	HLSF-3839-HMW-033-0310	03/22/10 10:23 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/23/10 02:42 PM	40143
1003170-05A	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW5030B	Purge and Trap Water GC/MS	03/25/10 09:34 AM	40178
1003170-05B	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW5030B	Purge and Trap Water GC-Gas	03/23/10 02:39 PM	40142
1003170-05C	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	M5310C	TOC prep Aqueous	03/24/10 09:00 AM	40168
1003170-05D	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:48 AM	40155
	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
1003170-05E	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:50 AM	40156
	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
1003170-05F	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	E300	Anion Preparation	03/23/10 08:30 AM	40144
	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	M2320 B	Alkalinity Preparation	03/23/10 12:30 PM	40145

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Lab Order: 1003170

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	M4500-H+ B	pH Preparation	03/23/10 11:00 AM	40138
1003170-05G	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
1003170-05H	HLSF-3839-HMW-133-0310	03/22/10 10:23 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/23/10 02:42 PM	40143
1003170-06A	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	SW5030B	Purge and Trap Water GC/MS	03/25/10 09:34 AM	40178
1003170-06B	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	SW5030B	Purge and Trap Water GC-Gas	03/23/10 02:39 PM	40142
1003170-06C	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	M5310C	TOC prep Aqueous	03/24/10 09:00 AM	40168
1003170-06D	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:48 AM	40155
	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
1003170-06E	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:50 AM	40156
	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
1003170-06F	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	E300	Anion Preparation	03/23/10 08:30 AM	40144
	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	M2320 B	Alkalinity Preparation	03/23/10 12:30 PM	40145
	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	M4500-H+ B	pH Preparation	03/23/10 11:00 AM	40138
1003170-06G	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
1003170-06H	HLSF-3839-RB-001-0310	03/22/10 12:45 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/23/10 02:42 PM	40143
1003170-07A	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	SW5030B	Purge and Trap Water GC/MS	03/25/10 09:34 AM	40178
1003170-07B	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	SW5030B	Purge and Trap Water GC-Gas	03/23/10 02:39 PM	40142
1003170-07C	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	M5310C	TOC prep Aqueous	03/24/10 09:00 AM	40168
1003170-07D	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:48 AM	40155
	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
1003170-07E	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:50 AM	40156
	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
1003170-07F	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	E300	Anion Preparation	03/23/10 08:30 AM	40144
	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	M2320 B	Alkalinity Preparation	03/23/10 12:30 PM	40145
	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	M4500-H+ B	pH Preparation	03/23/10 11:00 AM	40138
1003170-07G	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
1003170-07H	HLSF-3839-HMW-029-0310	03/19/10 12:33 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/23/10 02:42 PM	40143
1003170-08A	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW5030B	Purge and Trap Water GC/MS	03/25/10 09:34 AM	40178

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Lab Order: 1003170

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1003170-08B	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW5030B	Purge and Trap Water GC-Gas	03/23/10 02:39 PM	40142
1003170-08C	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	M5310C	TOC prep Aqueous	03/24/10 09:00 AM	40168
1003170-08D	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:48 AM	40155
	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/24/10 08:47 AM	40153
1003170-08E	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/24/10 08:50 AM	40156
	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/24/10 08:35 AM	40148
1003170-08F	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	E300	Anion Preparation	03/23/10 08:30 AM	40144
	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	M2320 B	Alkalinity Preparation	03/23/10 12:30 PM	40145
	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	M4500-H+ B	pH Preparation	03/23/10 11:00 AM	40138
1003170-08G	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/24/10 09:04 AM	40157
1003170-08H	HLSF-3839-HMW-034-0310	03/19/10 10:10 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/23/10 02:42 PM	40143

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Lab Order: 1003170

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1003170-01A	HLSF-3839-HMW-035-0310	Aqueous	SW8260B	8260 Water Volatiles by GC/MS	40178	1	03/25/10 05:48 PM	GCMS5_100325A
1003170-01B	HLSF-3839-HMW-035-0310	Aqueous	M8015V	Method 8015 Gasoline (GRO)	40142	1	03/23/10 04:18 PM	GC4_100323A
1003170-01C	HLSF-3839-HMW-035-0310	Aqueous	M5310C	Total Organic Carbon	40135	1	03/23/10 02:22 PM	TOC_100323A
1003170-01D	HLSF-3839-HMW-035-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	100	03/29/10 02:36 PM	ICP-MS3_100329B
	HLSF-3839-HMW-035-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	1	03/29/10 04:46 PM	ICP-MS3_100329B
	HLSF-3839-HMW-035-0310	Aqueous	SW7470A	Mercury Filtered (0.45µ)	40155	1	03/26/10 02:15 PM	CETAC_HG_100326C
1003170-01E	HLSF-3839-HMW-035-0310	Aqueous	SW7470A	Total Mercury: Aqueous	40156	1	03/26/10 02:42 PM	CETAC_HG_100326C
	HLSF-3839-HMW-035-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	100	03/30/10 02:33 PM	ICP-MS2_100330B
	HLSF-3839-HMW-035-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1	03/30/10 08:32 PM	ICP-MS2_100330B
	HLSF-3839-HMW-035-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1	03/31/10 01:23 PM	ICP-MS2_100331A
1003170-01F	HLSF-3839-HMW-035-0310	Aqueous	M2320 B	Alkalinity	40145	1	03/23/10 01:38 PM	TITRATOR_100323B
	HLSF-3839-HMW-035-0310	Aqueous	E300	Anions by IC method - Water	40144	100	03/23/10 01:57 PM	IC_100323A
	HLSF-3839-HMW-035-0310	Aqueous	M4500-H+ B	pH	40138	1	03/23/10 11:29 AM	TITRATOR_100323A
1003170-01G	HLSF-3839-HMW-035-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	03/31/10 09:09 PM	GCMS4_100331A
	HLSF-3839-HMW-035-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	04/01/10 07:02 PM	GCMS4_100401A
1003170-01H	HLSF-3839-HMW-035-0310	Aqueous	M8015D	TPH Extractable by GC - Water	40143	1	03/24/10 09:14 AM	GC15_100324B
1003170-02A	HLSF-3839-TB-203-0310	Trip Blank	SW8260B	8260 Water Volatiles by GC/MS	40178	1	03/25/10 11:59 AM	GCMS5_100325A
1003170-03A	HLSF-3839-HMW-032-0310	Aqueous	SW8260B	8260 Water Volatiles by GC/MS	40178	1	03/25/10 06:13 PM	GCMS5_100325A
1003170-03B	HLSF-3839-HMW-032-0310	Aqueous	M8015V	Method 8015 Gasoline (GRO)	40142	1	03/23/10 04:40 PM	GC4_100323A
1003170-03C	HLSF-3839-HMW-032-0310	Aqueous	M5310C	Total Organic Carbon	40135	1	03/23/10 02:55 PM	TOC_100323A
1003170-03D	HLSF-3839-HMW-032-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	100	03/29/10 02:42 PM	ICP-MS3_100329B
	HLSF-3839-HMW-032-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	1	03/29/10 04:52 PM	ICP-MS3_100329B
	HLSF-3839-HMW-032-0310	Aqueous	SW7470A	Mercury Filtered (0.45µ)	40155	1	03/26/10 02:17 PM	CETAC_HG_100326C
1003170-03E	HLSF-3839-HMW-032-0310	Aqueous	SW7470A	Total Mercury: Aqueous	40156	1	03/26/10 02:44 PM	CETAC_HG_100326C
	HLSF-3839-HMW-032-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	100	03/30/10 02:39 PM	ICP-MS2_100330B
	HLSF-3839-HMW-032-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1	03/30/10 08:37 PM	ICP-MS2_100330B
	HLSF-3839-HMW-032-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1	03/31/10 01:28 PM	ICP-MS2_100331A
1003170-03F	HLSF-3839-HMW-032-0310	Aqueous	M2320 B	Alkalinity	40145	1	03/23/10 01:47 PM	TITRATOR_100323B
	HLSF-3839-HMW-032-0310	Aqueous	E300	Anions by IC method - Water	40144	100	03/23/10 02:08 PM	IC_100323A
	HLSF-3839-HMW-032-0310	Aqueous	M4500-H+ B	pH	40138	1	03/23/10 11:32 AM	TITRATOR_100323A
1003170-03G	HLSF-3839-HMW-032-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	03/31/10 09:59 PM	GCMS4_100331A
	HLSF-3839-HMW-032-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	04/01/10 07:27 PM	GCMS4_100401A
1003170-03H	HLSF-3839-HMW-032-0310	Aqueous	M8015D	TPH Extractable by GC - Water	40143	1	03/24/10 09:23 AM	GC15_100324B

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Lab Order: 1003170

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1003170-04A	HLSF-3839-HMW-033-0310	Aqueous	SW8260B	8260 Water Volatiles by GC/MS	40178	1	03/25/10 06:39 PM	GCMS5_100325A
1003170-04B	HLSF-3839-HMW-033-0310	Aqueous	M8015V	Method 8015 Gasoline (GRO)	40142	1	03/23/10 05:02 PM	GC4_100323A
1003170-04C	HLSF-3839-HMW-033-0310	Aqueous	M5310C	Total Organic Carbon	40135	1	03/23/10 03:38 PM	TOC_100323A
1003170-04D	HLSF-3839-HMW-033-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	100	03/29/10 02:47 PM	ICP-MS3_100329B
	HLSF-3839-HMW-033-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	500	03/29/10 03:10 PM	ICP-MS3_100329B
	HLSF-3839-HMW-033-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	1	03/29/10 04:57 PM	ICP-MS3_100329B
	HLSF-3839-HMW-033-0310	Aqueous	SW7470A	Mercury Filtered (0.45µ)	40155	1	03/26/10 02:19 PM	CETAC_HG_100326C
1003170-04E	HLSF-3839-HMW-033-0310	Aqueous	SW7470A	Total Mercury: Aqueous	40156	1	03/26/10 02:46 PM	CETAC_HG_100326C
	HLSF-3839-HMW-033-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	100	03/30/10 02:44 PM	ICP-MS2_100330B
	HLSF-3839-HMW-033-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1000	03/30/10 04:24 PM	ICP-MS2_100330B
	HLSF-3839-HMW-033-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1	03/30/10 08:43 PM	ICP-MS2_100330B
	HLSF-3839-HMW-033-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	10	03/31/10 01:34 PM	ICP-MS2_100331A
1003170-04F	HLSF-3839-HMW-033-0310	Aqueous	M2320 B	Alkalinity	40145	1	03/23/10 01:53 PM	TITRATOR_100323B
	HLSF-3839-HMW-033-0310	Aqueous	E300	Anions by IC method - Water	40144	100	03/23/10 02:19 PM	IC_100323A
	HLSF-3839-HMW-033-0310	Aqueous	E300	Anions by IC method - Water	40144	1000	03/23/10 02:31 PM	IC_100323A
	HLSF-3839-HMW-033-0310	Aqueous	M4500-H+ B	pH	40138	1	03/23/10 11:33 AM	TITRATOR_100323A
1003170-04G	HLSF-3839-HMW-033-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	03/31/10 10:48 PM	GCMS4_100331A
	HLSF-3839-HMW-033-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	04/01/10 07:53 PM	GCMS4_100401A
1003170-04H	HLSF-3839-HMW-033-0310	Aqueous	M8015D	TPH Extractable by GC - Water	40143	1	03/24/10 09:32 AM	GC15_100324B
1003170-05A	HLSF-3839-HMW-133-0310	Aqueous	SW8260B	8260 Water Volatiles by GC/MS	40178	1	03/25/10 07:04 PM	GCMS5_100325A
1003170-05B	HLSF-3839-HMW-133-0310	Aqueous	M8015V	Method 8015 Gasoline (GRO)	40142	1	03/23/10 05:24 PM	GC4_100323A
1003170-05C	HLSF-3839-HMW-133-0310	Aqueous	M5310C	Total Organic Carbon	40168	1	03/24/10 01:27 PM	TOC_100324B
1003170-05D	HLSF-3839-HMW-133-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	100	03/29/10 02:53 PM	ICP-MS3_100329B
	HLSF-3839-HMW-133-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	500	03/29/10 03:15 PM	ICP-MS3_100329B
	HLSF-3839-HMW-133-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	1	03/29/10 05:03 PM	ICP-MS3_100329B
	HLSF-3839-HMW-133-0310	Aqueous	SW7470A	Mercury Filtered (0.45µ)	40155	1	03/26/10 02:21 PM	CETAC_HG_100326C
1003170-05E	HLSF-3839-HMW-133-0310	Aqueous	SW7470A	Total Mercury: Aqueous	40156	1	03/26/10 02:52 PM	CETAC_HG_100326C
	HLSF-3839-HMW-133-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	100	03/30/10 02:50 PM	ICP-MS2_100330B
	HLSF-3839-HMW-133-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1000	03/30/10 04:30 PM	ICP-MS2_100330B
	HLSF-3839-HMW-133-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1	03/30/10 08:48 PM	ICP-MS2_100330B
	HLSF-3839-HMW-133-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	5	03/31/10 01:39 PM	ICP-MS2_100331A
1003170-05F	HLSF-3839-HMW-133-0310	Aqueous	M2320 B	Alkalinity	40145	1	03/23/10 01:59 PM	TITRATOR_100323B
	HLSF-3839-HMW-133-0310	Aqueous	E300	Anions by IC method - Water	40144	1000	03/23/10 02:42 PM	IC_100323A

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Lab Order: 1003170

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
	HLSF-3839-HMW-133-0310	Aqueous	M4500-H+ B	pH	40138	1	03/23/10 11:34 AM	TITRATOR_100323A
1003170-05G	HLSF-3839-HMW-133-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	03/31/10 11:12 PM	GCMS4_100331A
	HLSF-3839-HMW-133-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	04/01/10 08:18 PM	GCMS4_100401A
1003170-05H	HLSF-3839-HMW-133-0310	Aqueous	M8015D	TPH Extractable by GC - Water	40143	1	03/24/10 09:41 AM	GC15_100324B
1003170-06A	HLSF-3839-RB-001-0310	Aqueous	SW8260B	8260 Water Volatiles by GC/MS	40178	1	03/25/10 07:28 PM	GCMS5_100325A
1003170-06B	HLSF-3839-RB-001-0310	Aqueous	M8015V	Method 8015 Gasoline (GRO)	40142	1	03/23/10 05:47 PM	GC4_100323A
1003170-06C	HLSF-3839-RB-001-0310	Aqueous	M5310C	Total Organic Carbon	40168	1	03/24/10 03:09 PM	TOC_100324B
1003170-06D	HLSF-3839-RB-001-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	1	03/29/10 03:21 PM	ICP-MS3_100329B
	HLSF-3839-RB-001-0310	Aqueous	SW7470A	Mercury Filtered (0.45µ)	40155	1	03/26/10 02:05 PM	CETAC_HG_100326C
1003170-06E	HLSF-3839-RB-001-0310	Aqueous	SW7470A	Total Mercury: Aqueous	40156	1	03/26/10 02:32 PM	CETAC_HG_100326C
	HLSF-3839-RB-001-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1	03/30/10 04:19 PM	ICP-MS2_100330B
1003170-06F	HLSF-3839-RB-001-0310	Aqueous	M2320 B	Alkalinity	40145	1	03/23/10 02:01 PM	TITRATOR_100323B
	HLSF-3839-RB-001-0310	Aqueous	E300	Anions by IC method - Water	40144	1	03/23/10 02:53 PM	IC_100323A
	HLSF-3839-RB-001-0310	Aqueous	M4500-H+ B	pH	40138	1	03/23/10 11:35 AM	TITRATOR_100323A
1003170-06G	HLSF-3839-RB-001-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	03/31/10 11:37 PM	GCMS4_100331A
	HLSF-3839-RB-001-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	04/01/10 08:43 PM	GCMS4_100401A
1003170-06H	HLSF-3839-RB-001-0310	Aqueous	M8015D	TPH Extractable by GC - Water	40143	1	03/24/10 09:58 AM	GC15_100324B
1003170-07A	HLSF-3839-HMW-029-0310	Aqueous	SW8260B	8260 Water Volatiles by GC/MS	40178	1	03/25/10 07:53 PM	GCMS5_100325A
1003170-07B	HLSF-3839-HMW-029-0310	Aqueous	M8015V	Method 8015 Gasoline (GRO)	40142	1	03/23/10 06:10 PM	GC4_100323A
1003170-07C	HLSF-3839-HMW-029-0310	Aqueous	M5310C	Total Organic Carbon	40168	1	03/24/10 03:26 PM	TOC_100324B
1003170-07D	HLSF-3839-HMW-029-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	100	03/29/10 01:52 PM	ICP-MS3_100329B
	HLSF-3839-HMW-029-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	1	03/29/10 05:14 PM	ICP-MS3_100329B
	HLSF-3839-HMW-029-0310	Aqueous	SW7470A	Mercury Filtered (0.45µ)	40155	1	03/26/10 02:28 PM	CETAC_HG_100326C
1003170-07E	HLSF-3839-HMW-029-0310	Aqueous	SW7470A	Total Mercury: Aqueous	40156	1	03/26/10 02:54 PM	CETAC_HG_100326C
	HLSF-3839-HMW-029-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1	03/29/10 02:29 PM	ICP-MS2_100329B
	HLSF-3839-HMW-029-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	100	03/31/10 12:34 PM	ICP-MS2_100331A
1003170-07F	HLSF-3839-HMW-029-0310	Aqueous	M2320 B	Alkalinity	40145	1	03/23/10 02:07 PM	TITRATOR_100323B
	HLSF-3839-HMW-029-0310	Aqueous	E300	Anions by IC method - Water	40144	100	03/23/10 03:04 PM	IC_100323A
	HLSF-3839-HMW-029-0310	Aqueous	M4500-H+ B	pH	40138	1	03/23/10 11:36 AM	TITRATOR_100323A
1003170-07G	HLSF-3839-HMW-029-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	04/01/10 12:01 AM	GCMS4_100331A
	HLSF-3839-HMW-029-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	04/01/10 09:09 PM	GCMS4_100401A
1003170-07H	HLSF-3839-HMW-029-0310	Aqueous	M8015D	TPH Extractable by GC - Water	40143	1	03/24/10 09:49 AM	GC15_100324B
1003170-08A	HLSF-3839-HMW-034-0310	Aqueous	SW8260B	8260 Water Volatiles by GC/MS	40178	1	03/25/10 08:18 PM	GCMS5_100325A

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Lab Order: 1003170

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1003170-08B	HLSF-3839-HMW-034-0310	Aqueous	M8015V	Method 8015 Gasoline (GRO)	40142	1	03/23/10 06:32 PM	GC4_100323A
1003170-08C	HLSF-3839-HMW-034-0310	Aqueous	M5310C	Total Organic Carbon	40168	1	03/24/10 02:18 PM	TOC_100324B
1003170-08D	HLSF-3839-HMW-034-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	100	03/29/10 03:04 PM	ICP-MS3_100329B
	HLSF-3839-HMW-034-0310	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	40153	1	03/29/10 05:08 PM	ICP-MS3_100329B
	HLSF-3839-HMW-034-0310	Aqueous	SW7470A	Mercury Filtered (0.45µ)	40155	1	03/26/10 02:30 PM	CETAC_HG_100326C
1003170-08E	HLSF-3839-HMW-034-0310	Aqueous	SW7470A	Total Mercury: Aqueous	40156	1	03/26/10 02:57 PM	CETAC_HG_100326C
	HLSF-3839-HMW-034-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	100	03/30/10 03:01 PM	ICP-MS2_100330B
	HLSF-3839-HMW-034-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1	03/30/10 08:54 PM	ICP-MS2_100330B
	HLSF-3839-HMW-034-0310	Aqueous	SW6020	Trace Metals: ICP-MS - Water	40148	1	03/31/10 01:45 PM	ICP-MS2_100331A
1003170-08F	HLSF-3839-HMW-034-0310	Aqueous	M2320 B	Alkalinity	40145	1	03/23/10 02:12 PM	TITRATOR_100323B
	HLSF-3839-HMW-034-0310	Aqueous	E300	Anions by IC method - Water	40144	100	03/23/10 03:28 PM	IC_100323A
	HLSF-3839-HMW-034-0310	Aqueous	M4500-H+ B	pH	40138	1	03/23/10 11:39 AM	TITRATOR_100323A
1003170-08G	HLSF-3839-HMW-034-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	04/01/10 12:25 AM	GCMS4_100331A
	HLSF-3839-HMW-034-0310	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	40157	1	04/01/10 09:34 PM	GCMS4_100401A
1003170-08H	HLSF-3839-HMW-034-0310	Aqueous	M8015D	TPH Extractable by GC - Water	40143	1	03/24/10 11:26 AM	GC15_100324B

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-035-0310
Lab ID: 1003170-01
Collection Date: 03/19/10 12:20 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH Extractable by GC - Water		**M8015D**					**Analyst: AV**
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	03/24/10 09:14 AM
Surr: Isopropylbenzene	48.2	0	60 - 140	S	%REC	1	03/24/10 09:14 AM
Surr: Octacosane	79.0	0	51 - 124		%REC	1	03/24/10 09:14 AM
Method 8015 Gasoline (GRO)		**M8015V**					**Analyst: DEW**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/23/10 04:18 PM
Surr: Tetrachlorethene	111	0	74 - 138		%REC	1	03/23/10 04:18 PM
Mercury Filtered (0.45µ)		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:15 PM
Total Mercury: Aqueous		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:42 PM
Dissolved Metals-ICPMS (0.45µ)		**SW6020**					**Analyst: CZ**
Arsenic	0.00855	0.00200	0.00600		mg/L	1	03/29/10 04:46 PM
Barium	0.0109	0.00300	0.0100		mg/L	1	03/29/10 04:46 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 04:46 PM
Calcium	460	10.0	30.0		mg/L	100	03/29/10 02:36 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/29/10 04:46 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 04:46 PM
Magnesium	520	10.0	30.0		mg/L	100	03/29/10 02:36 PM
Potassium	45.6	10.0	30.0		mg/L	100	03/29/10 02:36 PM
Selenium	0.254	0.00200	0.00600		mg/L	1	03/29/10 04:46 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/29/10 04:46 PM
Sodium	2040	10.0	30.0		mg/L	100	03/29/10 02:36 PM
Trace Metals: ICP-MS - Water		**SW6020**					**Analyst: KL**
Arsenic	0.00978	0.00200	0.00600		mg/L	1	03/30/10 08:32 PM
Barium	0.0103	0.00300	0.0100		mg/L	1	03/30/10 08:32 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/30/10 08:32 PM
Calcium	436	10.0	30.0		mg/L	100	03/30/10 02:33 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 01:23 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/30/10 08:32 PM
Magnesium	468	10.0	30.0		mg/L	100	03/30/10 02:33 PM
Potassium	43.2	10.0	30.0		mg/L	100	03/30/10 02:33 PM
Selenium	0.254	0.00200	0.00600		mg/L	1	03/31/10 01:23 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/30/10 08:32 PM
Sodium	1920	10.0	30.0		mg/L	100	03/30/10 02:33 PM
Semivolatiles by GC/MS - Water		**SW8270C**					**Analyst: DO**
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
1,2,4-Trichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
1,2-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
1,3-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
1,4-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 07:02 PM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/31/10 09:09 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-035-0310
Lab ID: 1003170-01
Collection Date: 03/19/10 12:20 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 09:09 PM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
3,3´-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 09:09 PM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 09:09 PM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 09:09 PM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 09:09 PM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:09 PM
Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Benzoic acid	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:09 PM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 09:09 PM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-035-0310
Lab ID: 1003170-01
Collection Date: 03/19/10 12:20 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	03/31/10 09:09 PM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:09 PM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:09 PM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:09 PM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	04/01/10 07:02 PM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:09 PM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:09 PM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 07:02 PM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 09:09 PM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	03/31/10 09:09 PM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 07:02 PM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:02 PM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:09 PM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	03/31/10 09:09 PM
Surr: 2,4,6-Tribromophenol	79.0	0	42 - 124		%REC	1	03/31/10 09:09 PM
Surr: 2,4,6-Tribromophenol	72.8	0	42 - 124		%REC	1	04/01/10 07:02 PM
Surr: 2-Fluorobiphenyl	72.2	0	50 - 110		%REC	1	03/31/10 09:09 PM
Surr: 2-Fluorobiphenyl	64.5	0	50 - 110		%REC	1	04/01/10 07:02 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

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-035-0310
Lab ID: 1003170-01
Collection Date: 03/19/10 12:20 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	40.5	0	20 - 110		%REC	1	04/01/10 07:02 PM
Surr: 2-Fluorophenol	46.0	0	20 - 110		%REC	1	03/31/10 09:09 PM
Surr: 4-Terphenyl-d14	96.2	0	51 - 135		%REC	1	03/31/10 09:09 PM
Surr: 4-Terphenyl-d14	83.2	0	51 - 135		%REC	1	04/01/10 07:02 PM
Surr: Nitrobenzene-d5	77.8	0	41 - 110		%REC	1	03/31/10 09:09 PM
Surr: Nitrobenzene-d5	67.8	0	41 - 110		%REC	1	04/01/10 07:02 PM
Surr: Phenol-d6	31.5	0	20 - 115		%REC	1	03/31/10 09:09 PM
Surr: Phenol-d6	29.2	0	20 - 115		%REC	1	04/01/10 07:02 PM
8260 Water Volatiles by GC/MS		**SW8260B**					**Analyst: AJR**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 05:48 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 05:48 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 05:48 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/25/10 05:48 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 05:48 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/25/10 05:48 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 05:48 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 05:48 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 05:48 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 05:48 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 05:48 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 05:48 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-035-0310
Lab ID: 1003170-01
Collection Date: 03/19/10 12:20 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 05:48 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 05:48 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 05:48 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 05:48 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/25/10 05:48 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 05:48 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 05:48 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 05:48 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 05:48 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 05:48 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 05:48 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/25/10 05:48 PM
Surr: 1,2-Dichloroethane-d4	105	0	70 - 120		%REC	1	03/25/10 05:48 PM
Surr: 4-Bromofluorobenzene	105	0	75 - 120		%REC	1	03/25/10 05:48 PM
Surr: Dibromofluoromethane	102	0	85 - 115		%REC	1	03/25/10 05:48 PM
Surr: Toluene-d8	95.7	0	85 - 120		%REC	1	03/25/10 05:48 PM
Anions by IC method - Water		**E300**					**Analyst: JBC**
Chloride	1150	30.0	100		mg/L	100	03/23/10 01:57 PM
Sulfate	6470	100	300		mg/L	100	03/23/10 01:57 PM
Alkalinity		**M2320 B**					**Analyst: JBC**
Alkalinity, Bicarbonate (As CaCO3)	183	10.0	20.0		mg/L	1	03/23/10 01:38 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 01:38 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 01:38 PM
Alkalinity, Total (As CaCO3)	183	10.0	20.0		mg/L	1	03/23/10 01:38 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: 04/05/10

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-035-0310
Lab ID: 1003170-01
Collection Date: 03/19/10 12:20 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.62	0	0		pH Units	1	03/23/10 11:29 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	0.937	0.300	1.00	J	mg/L	1	03/23/10 02:22 PM

Qualifiers:

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

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-TB-203-0310
Lab ID: 1003170-02
Collection Date: 03/19/10 12:20 PM
Matrix: Trip Blank

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 Water Volatiles by GC/MS		**SW8260B**					**Analyst: AJR**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 11:59 AM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 11:59 AM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 11:59 AM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/25/10 11:59 AM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 11:59 AM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/25/10 11:59 AM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 11:59 AM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 11:59 AM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 11:59 AM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 11:59 AM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 11:59 AM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 11:59 AM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 11:59 AM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 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

DHL Analytical

Date: 04/05/10

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-TB-203-0310
Lab ID: 1003170-02
Collection Date: 03/19/10 12:20 PM
Matrix: Trip Blank

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 11:59 AM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 11:59 AM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 11:59 AM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/25/10 11:59 AM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 11:59 AM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 11:59 AM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 11:59 AM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 11:59 AM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 11:59 AM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 11:59 AM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/25/10 11:59 AM
Surr: 1,2-Dichloroethane-d4	107	0	70 - 120		%REC	1	03/25/10 11:59 AM
Surr: 4-Bromofluorobenzene	107	0	75 - 120		%REC	1	03/25/10 11:59 AM
Surr: Dibromofluoromethane	104	0	85 - 115		%REC	1	03/25/10 11:59 AM
Surr: Toluene-d8	96.3	0	85 - 120		%REC	1	03/25/10 11:59 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-032-0310
Lab ID: 1003170-03
Collection Date: 03/19/10 10:16 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH Extractable by GC - Water		**M8015D**					**Analyst: AV**
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	03/24/10 09:23 AM
Surr: Isopropylbenzene	54.6	0	60 - 140	S	%REC	1	03/24/10 09:23 AM
Surr: Octacosane	82.0	0	51 - 124		%REC	1	03/24/10 09:23 AM
Method 8015 Gasoline (GRO)		**M8015V**					**Analyst: DEW**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/23/10 04:40 PM
Surr: Tetrachlorethene	110	0	74 - 138		%REC	1	03/23/10 04:40 PM
Mercury Filtered (0.45µ)		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:17 PM
Total Mercury: Aqueous		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:44 PM
Dissolved Metals-ICPMS (0.45µ)		**SW6020**					**Analyst: CZ**
Arsenic	0.00425	0.00200	0.00600	J	mg/L	1	03/29/10 04:52 PM
Barium	0.0155	0.00300	0.0100		mg/L	1	03/29/10 04:52 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 04:52 PM
Calcium	426	10.0	30.0		mg/L	100	03/29/10 02:42 PM
Chromium	0.0113	0.00200	0.00600		mg/L	1	03/29/10 04:52 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 04:52 PM
Magnesium	399	10.0	30.0		mg/L	100	03/29/10 02:42 PM
Potassium	46.4	10.0	30.0		mg/L	100	03/29/10 02:42 PM
Selenium	0.0534	0.00200	0.00600		mg/L	1	03/29/10 04:52 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/29/10 04:52 PM
Sodium	2360	10.0	30.0		mg/L	100	03/29/10 02:42 PM
Trace Metals: ICP-MS - Water		**SW6020**					**Analyst: KL**
Arsenic	0.00537	0.00200	0.00600	J	mg/L	1	03/30/10 08:37 PM
Barium	0.0173	0.00300	0.0100		mg/L	1	03/30/10 08:37 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/30/10 08:37 PM
Calcium	416	10.0	30.0		mg/L	100	03/30/10 02:39 PM
Chromium	0.00945	0.00200	0.00600		mg/L	1	03/31/10 01:28 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/30/10 08:37 PM
Magnesium	405	10.0	30.0		mg/L	100	03/30/10 02:39 PM
Potassium	46.5	10.0	30.0		mg/L	100	03/30/10 02:39 PM
Selenium	0.0552	0.00200	0.00600		mg/L	1	03/31/10 01:28 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/30/10 08:37 PM
Sodium	2390	10.0	30.0		mg/L	100	03/30/10 02:39 PM
Semivolatiles by GC/MS - Water		**SW8270C**					**Analyst: DO**
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
1,2,4-Trichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
1,2-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
1,3-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
1,4-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 07:27 PM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/31/10 09:59 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-032-0310
Lab ID: 1003170-03
Collection Date: 03/19/10 10:16 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 09:59 PM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
3,3´-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 09:59 PM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 09:59 PM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 09:59 PM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 09:59 PM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:59 PM
Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Benzoic acid	0.00216	0.00200	0.00600	J	mg/L	1	03/31/10 09:59 PM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 09:59 PM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM

Qualifiers:

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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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-032-0310
Lab ID: 1003170-03
Collection Date: 03/19/10 10:16 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	03/31/10 09:59 PM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:59 PM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:59 PM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:59 PM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	04/01/10 07:27 PM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:59 PM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 09:59 PM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 07:27 PM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 09:59 PM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	03/31/10 09:59 PM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 07:27 PM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:27 PM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 09:59 PM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	03/31/10 09:59 PM
Surr: 2,4,6-Tribromophenol	62.5	0	42 - 124		%REC	1	03/31/10 09:59 PM
Surr: 2,4,6-Tribromophenol	56.0	0	42 - 124		%REC	1	04/01/10 07:27 PM
Surr: 2-Fluorobiphenyl	54.8	0	50 - 110		%REC	1	03/31/10 09:59 PM
Surr: 2-Fluorobiphenyl	47.8	0	50 - 110	S	%REC	1	04/01/10 07:27 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-032-0310
Lab ID: 1003170-03
Collection Date: 03/19/10 10:16 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	34.8	0	20 - 110		%REC	1	04/01/10 07:27 PM
Surr: 2-Fluorophenol	39.5	0	20 - 110		%REC	1	03/31/10 09:59 PM
Surr: 4-Terphenyl-d14	72.2	0	51 - 135		%REC	1	03/31/10 09:59 PM
Surr: 4-Terphenyl-d14	60.5	0	51 - 135		%REC	1	04/01/10 07:27 PM
Surr: Nitrobenzene-d5	60.2	0	41 - 110		%REC	1	03/31/10 09:59 PM
Surr: Nitrobenzene-d5	52.8	0	41 - 110		%REC	1	04/01/10 07:27 PM
Surr: Phenol-d6	29.0	0	20 - 115		%REC	1	03/31/10 09:59 PM
Surr: Phenol-d6	26.2	0	20 - 115		%REC	1	04/01/10 07:27 PM
8260 Water Volatiles by GC/MS		**SW8260B**					**Analyst: AJR**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 06:13 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 06:13 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 06:13 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/25/10 06:13 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 06:13 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/25/10 06:13 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:13 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:13 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:13 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:13 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:13 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 06:13 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-032-0310
Lab ID: 1003170-03
Collection Date: 03/19/10 10:16 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:13 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 06:13 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:13 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 06:13 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/25/10 06:13 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:13 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:13 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 06:13 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 06:13 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 06:13 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:13 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/25/10 06:13 PM
Surr: 1,2-Dichloroethane-d4	106	0	70 - 120		%REC	1	03/25/10 06:13 PM
Surr: 4-Bromofluorobenzene	104	0	75 - 120		%REC	1	03/25/10 06:13 PM
Surr: Dibromofluoromethane	103	0	85 - 115		%REC	1	03/25/10 06:13 PM
Surr: Toluene-d8	96.7	0	85 - 120		%REC	1	03/25/10 06:13 PM
Anions by IC method - Water		**E300**					**Analyst: JBC**
Chloride	1330	30.0	100		mg/L	100	03/23/10 02:08 PM
Sulfate	6650	100	300		mg/L	100	03/23/10 02:08 PM
Alkalinity		**M2320 B**					**Analyst: JBC**
Alkalinity, Bicarbonate (As CaCO3)	92.2	10.0	20.0		mg/L	1	03/23/10 01:47 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 01:47 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 01:47 PM
Alkalinity, Total (As CaCO3)	92.2	10.0	20.0		mg/L	1	03/23/10 01:47 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: 04/05/10

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-032-0310
Lab ID: 1003170-03
Collection Date: 03/19/10 10:16 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.41	0	0		pH Units	1	03/23/10 11:32 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	0.736	0.300	1.00	J	mg/L	1	03/23/10 02:55 PM

Qualifiers:

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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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-033-0310
Lab ID: 1003170-04
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH Extractable by GC - Water		**M8015D**					**Analyst: AV**
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	03/24/10 09:32 AM
Surr: Isopropylbenzene	53.7	0	60 - 140	S	%REC	1	03/24/10 09:32 AM
Surr: Octacosane	83.9	0	51 - 124		%REC	1	03/24/10 09:32 AM
Method 8015 Gasoline (GRO)		**M8015V**					**Analyst: DEW**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/23/10 05:02 PM
Surr: Tetrachlorethene	112	0	74 - 138		%REC	1	03/23/10 05:02 PM
Mercury Filtered (0.45µ)		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:19 PM
Total Mercury: Aqueous		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:46 PM
Dissolved Metals-ICPMS (0.45µ)		**SW6020**					**Analyst: CZ**
Arsenic	0.0104	0.00200	0.00600		mg/L	1	03/29/10 04:57 PM
Barium	0.0104	0.00300	0.0100		mg/L	1	03/29/10 04:57 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 04:57 PM
Calcium	500	10.0	30.0		mg/L	100	03/29/10 02:47 PM
Chromium	0.688	0.00200	0.00600		mg/L	1	03/29/10 04:57 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 04:57 PM
Magnesium	2140	10.0	30.0		mg/L	100	03/29/10 02:47 PM
Potassium	140	10.0	30.0		mg/L	100	03/29/10 02:47 PM
Selenium	0.933	0.00200	0.00600		mg/L	1	03/29/10 04:57 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/29/10 04:57 PM
Sodium	5920	50.0	150		mg/L	500	03/29/10 03:10 PM
Trace Metals: ICP-MS - Water		**SW6020**					**Analyst: KL**
Arsenic	0.0114	0.00200	0.00600		mg/L	1	03/30/10 08:43 PM
Barium	0.00971	0.00300	0.0100	J	mg/L	1	03/30/10 08:43 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/30/10 08:43 PM
Calcium	478	10.0	30.0		mg/L	100	03/30/10 02:44 PM
Chromium	0.747	0.0200	0.0600		mg/L	10	03/31/10 01:34 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/30/10 08:43 PM
Magnesium	2100	10.0	30.0		mg/L	100	03/30/10 02:44 PM
Potassium	136	10.0	30.0		mg/L	100	03/30/10 02:44 PM
Selenium	0.763	0.0200	0.0600		mg/L	10	03/31/10 01:34 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/30/10 08:43 PM
Sodium	5830	100	300		mg/L	1000	03/30/10 04:24 PM
Semivolatiles by GC/MS - Water		**SW8270C**					**Analyst: DO**
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
1,2,4-Trichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
1,2-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
1,3-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
1,4-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 07:53 PM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/31/10 10:48 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-033-0310
Lab ID: 1003170-04
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 10:48 PM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
3,3´-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 10:48 PM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 10:48 PM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 10:48 PM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 10:48 PM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 10:48 PM
Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Benzoic acid	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 10:48 PM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 10:48 PM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-033-0310
Lab ID: 1003170-04
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	03/31/10 10:48 PM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 10:48 PM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 10:48 PM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 10:48 PM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	04/01/10 07:53 PM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 10:48 PM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 10:48 PM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 07:53 PM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 10:48 PM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	03/31/10 10:48 PM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 07:53 PM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 07:53 PM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 10:48 PM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	03/31/10 10:48 PM
Surr: 2,4,6-Tribromophenol	30.5	0	42 - 124	S	%REC	1	03/31/10 10:48 PM
Surr: 2,4,6-Tribromophenol	28.3	0	42 - 124	S	%REC	1	04/01/10 07:53 PM
Surr: 2-Fluorobiphenyl	104	0	50 - 110		%REC	1	03/31/10 10:48 PM
Surr: 2-Fluorobiphenyl	91.0	0	50 - 110		%REC	1	04/01/10 07:53 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-033-0310
Lab ID: 1003170-04
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	24.2	0	20 - 110		%REC	1	04/01/10 07:53 PM
Surr: 2-Fluorophenol	27.8	0	20 - 110		%REC	1	03/31/10 10:48 PM
Surr: 4-Terphenyl-d14	127	0	51 - 135		%REC	1	03/31/10 10:48 PM
Surr: 4-Terphenyl-d14	110	0	51 - 135		%REC	1	04/01/10 07:53 PM
Surr: Nitrobenzene-d5	109	0	41 - 110		%REC	1	03/31/10 10:48 PM
Surr: Nitrobenzene-d5	95.8	0	41 - 110		%REC	1	04/01/10 07:53 PM
Surr: Phenol-d6	30.5	0	20 - 115		%REC	1	03/31/10 10:48 PM
Surr: Phenol-d6	28.0	0	20 - 115		%REC	1	04/01/10 07:53 PM
8260 Water Volatiles by GC/MS		**SW8260B**					**Analyst: AJR**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
1,1-Dichloroethene	0.00379	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 06:39 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 06:39 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 06:39 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/25/10 06:39 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 06:39 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/25/10 06:39 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:39 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:39 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:39 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:39 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:39 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 06:39 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-033-0310
Lab ID: 1003170-04
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:39 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
Chloroform	0.00116	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 06:39 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:39 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 06:39 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/25/10 06:39 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 06:39 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 06:39 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 06:39 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 06:39 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 06:39 PM
Trichloroethene	0.00429	0.000600	0.00200		mg/L	1	03/25/10 06:39 PM
Trichlorofluoromethane	0.000650	0.000200	0.00100	J	mg/L	1	03/25/10 06:39 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/25/10 06:39 PM
Surr: 1,2-Dichloroethane-d4	107	0	70 - 120		%REC	1	03/25/10 06:39 PM
Surr: 4-Bromofluorobenzene	106	0	75 - 120		%REC	1	03/25/10 06:39 PM
Surr: Dibromofluoromethane	103	0	85 - 115		%REC	1	03/25/10 06:39 PM
Surr: Toluene-d8	97.2	0	85 - 120		%REC	1	03/25/10 06:39 PM
Anions by IC method - Water		**E300**					**Analyst: JBC**
Chloride	6600	300	1000		mg/L	1000	03/23/10 02:31 PM
Sulfate	14700	100	300		mg/L	100	03/23/10 02:19 PM
Alkalinity		**M2320 B**					**Analyst: JBC**
Alkalinity, Bicarbonate (As CaCO3)	194	10.0	20.0		mg/L	1	03/23/10 01:53 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 01:53 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 01:53 PM
Alkalinity, Total (As CaCO3)	194	10.0	20.0		mg/L	1	03/23/10 01:53 PM

Qualifiers:

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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: 04/05/10

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-033-0310
Lab ID: 1003170-04
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.42	0	0		pH Units	1	03/23/10 11:33 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	4.32	0.300	1.00		mg/L	1	03/23/10 03:38 PM

Qualifiers:

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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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-133-0310
Lab ID: 1003170-05
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH Extractable by GC - Water		**M8015D**					**Analyst: AV**
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	03/24/10 09:41 AM
Surr: Isopropylbenzene	50.7	0	60 - 140	S	%REC	1	03/24/10 09:41 AM
Surr: Octacosane	83.3	0	51 - 124		%REC	1	03/24/10 09:41 AM
Method 8015 Gasoline (GRO)		**M8015V**					**Analyst: DEW**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/23/10 05:24 PM
Surr: Tetrachlorethene	106	0	74 - 138		%REC	1	03/23/10 05:24 PM
Mercury Filtered (0.45µ)		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:21 PM
Total Mercury: Aqueous		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:52 PM
Dissolved Metals-ICPMS (0.45µ)		**SW6020**					**Analyst: CZ**
Arsenic	0.0106	0.00200	0.00600		mg/L	1	03/29/10 05:03 PM
Barium	0.0108	0.00300	0.0100		mg/L	1	03/29/10 05:03 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 05:03 PM
Calcium	509	10.0	30.0		mg/L	100	03/29/10 02:53 PM
Chromium	0.676	0.00200	0.00600		mg/L	1	03/29/10 05:03 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 05:03 PM
Magnesium	2120	10.0	30.0		mg/L	100	03/29/10 02:53 PM
Potassium	142	10.0	30.0		mg/L	100	03/29/10 02:53 PM
Selenium	0.971	0.00200	0.00600		mg/L	1	03/29/10 05:03 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/29/10 05:03 PM
Sodium	5860	50.0	150		mg/L	500	03/29/10 03:15 PM
Trace Metals: ICP-MS - Water		**SW6020**					**Analyst: KL**
Arsenic	0.0123	0.00200	0.00600		mg/L	1	03/30/10 08:48 PM
Barium	0.00996	0.00300	0.0100	J	mg/L	1	03/30/10 08:48 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/30/10 08:48 PM
Calcium	476	10.0	30.0		mg/L	100	03/30/10 02:50 PM
Chromium	0.734	0.0100	0.0300		mg/L	5	03/31/10 01:39 PM
Lead	<0.00150	0.00150	0.00500		mg/L	5	03/31/10 01:39 PM
Magnesium	2050	10.0	30.0		mg/L	100	03/30/10 02:50 PM
Potassium	137	10.0	30.0		mg/L	100	03/30/10 02:50 PM
Selenium	0.800	0.0100	0.0300		mg/L	5	03/31/10 01:39 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/30/10 08:48 PM
Sodium	5770	100	300		mg/L	1000	03/30/10 04:30 PM
Semivolatiles by GC/MS - Water		**SW8270C**					**Analyst: DO**
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
1,2,4-Trichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
1,2-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
1,3-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
1,4-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 08:18 PM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/31/10 11:12 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-133-0310
Lab ID: 1003170-05
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 11:12 PM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
3,3´-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 11:12 PM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 11:12 PM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 11:12 PM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 11:12 PM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:12 PM
Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Benzoic acid	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:12 PM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 11:12 PM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-133-0310
Lab ID: 1003170-05
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	03/31/10 11:12 PM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:12 PM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:12 PM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:12 PM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	04/01/10 08:18 PM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:12 PM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:12 PM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 08:18 PM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 11:12 PM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	03/31/10 11:12 PM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 08:18 PM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:18 PM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:12 PM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	03/31/10 11:12 PM
Surr: 2,4,6-Tribromophenol	40.0	0	42 - 124	S	%REC	1	03/31/10 11:12 PM
Surr: 2,4,6-Tribromophenol	37.5	0	42 - 124	S	%REC	1	04/01/10 08:18 PM
Surr: 2-Fluorobiphenyl	79.8	0	50 - 110		%REC	1	03/31/10 11:12 PM
Surr: 2-Fluorobiphenyl	71.0	0	50 - 110		%REC	1	04/01/10 08:18 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-133-0310
Lab ID: 1003170-05
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	30.0	0	20 - 110		%REC	1	04/01/10 08:18 PM
Surr: 2-Fluorophenol	34.5	0	20 - 110		%REC	1	03/31/10 11:12 PM
Surr: 4-Terphenyl-d14	104	0	51 - 135		%REC	1	03/31/10 11:12 PM
Surr: 4-Terphenyl-d14	86.5	0	51 - 135		%REC	1	04/01/10 08:18 PM
Surr: Nitrobenzene-d5	86.0	0	41 - 110		%REC	1	03/31/10 11:12 PM
Surr: Nitrobenzene-d5	75.2	0	41 - 110		%REC	1	04/01/10 08:18 PM
Surr: Phenol-d6	32.8	0	20 - 115		%REC	1	03/31/10 11:12 PM
Surr: Phenol-d6	30.8	0	20 - 115		%REC	1	04/01/10 08:18 PM
8260 Water Volatiles by GC/MS		**SW8260B**					**Analyst: AJR**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
1,1-Dichloroethene	0.00351	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:04 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:04 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:04 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/25/10 07:04 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:04 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/25/10 07:04 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:04 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:04 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:04 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:04 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:04 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 07:04 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-133-0310
Lab ID: 1003170-05
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:04 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
Chloroform	0.00118	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 07:04 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:04 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 07:04 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/25/10 07:04 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:04 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:04 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 07:04 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 07:04 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:04 PM
Trichloroethene	0.00432	0.000600	0.00200		mg/L	1	03/25/10 07:04 PM
Trichlorofluoromethane	0.000650	0.000200	0.00100	J	mg/L	1	03/25/10 07:04 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/25/10 07:04 PM
Surr: 1,2-Dichloroethane-d4	108	0	70 - 120		%REC	1	03/25/10 07:04 PM
Surr: 4-Bromofluorobenzene	105	0	75 - 120		%REC	1	03/25/10 07:04 PM
Surr: Dibromofluoromethane	104	0	85 - 115		%REC	1	03/25/10 07:04 PM
Surr: Toluene-d8	97.6	0	85 - 120		%REC	1	03/25/10 07:04 PM
Anions by IC method - Water		**E300**					**Analyst: JBC**
Chloride	6640	300	1000		mg/L	1000	03/23/10 02:42 PM
Sulfate	14500	1000	3000		mg/L	1000	03/23/10 02:42 PM
Alkalinity		**M2320 B**					**Analyst: JBC**
Alkalinity, Bicarbonate (As CaCO3)	193	10.0	20.0		mg/L	1	03/23/10 01:59 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 01:59 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 01:59 PM
Alkalinity, Total (As CaCO3)	193	10.0	20.0		mg/L	1	03/23/10 01:59 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: 04/05/10

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-133-0310
Lab ID: 1003170-05
Collection Date: 03/22/10 10:23 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.36	0	0		pH Units	1	03/23/10 11:34 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	4.52	0.300	1.00		mg/L	1	03/24/10 01:27 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-RB-001-0310
Lab ID: 1003170-06
Collection Date: 03/22/10 12:45 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH Extractable by GC - Water		**M8015D**					**Analyst: AV**
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	03/24/10 09:58 AM
Surr: Isopropylbenzene	61.9	0	60 - 140		%REC	1	03/24/10 09:58 AM
Surr: Octacosane	87.9	0	51 - 124		%REC	1	03/24/10 09:58 AM
Method 8015 Gasoline (GRO)		**M8015V**					**Analyst: DEW**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/23/10 05:47 PM
Surr: Tetrachlorethene	98.9	0	74 - 138		%REC	1	03/23/10 05:47 PM
Mercury Filtered (0.45µ)		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:05 PM
Total Mercury: Aqueous		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:32 PM
Dissolved Metals-ICPMS (0.45µ)		**SW6020**					**Analyst: CZ**
Arsenic	<0.00200	0.00200	0.00600		mg/L	1	03/29/10 03:21 PM
Barium	<0.00300	0.00300	0.0100		mg/L	1	03/29/10 03:21 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 03:21 PM
Calcium	<0.100	0.100	0.300		mg/L	1	03/29/10 03:21 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/29/10 03:21 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 03:21 PM
Magnesium	<0.100	0.100	0.300		mg/L	1	03/29/10 03:21 PM
Potassium	<0.100	0.100	0.300		mg/L	1	03/29/10 03:21 PM
Selenium	<0.00200	0.00200	0.00600		mg/L	1	03/29/10 03:21 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/29/10 03:21 PM
Sodium	0.143	0.100	0.300	J	mg/L	1	03/29/10 03:21 PM
Trace Metals: ICP-MS - Water		**SW6020**					**Analyst: KL**
Arsenic	<0.00200	0.00200	0.00600		mg/L	1	03/30/10 04:19 PM
Barium	<0.00300	0.00300	0.0100		mg/L	1	03/30/10 04:19 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/30/10 04:19 PM
Calcium	0.104	0.100	0.300	J	mg/L	1	03/30/10 04:19 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/30/10 04:19 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/30/10 04:19 PM
Magnesium	<0.100	0.100	0.300		mg/L	1	03/30/10 04:19 PM
Potassium	<0.100	0.100	0.300		mg/L	1	03/30/10 04:19 PM
Selenium	<0.00200	0.00200	0.00600		mg/L	1	03/30/10 04:19 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/30/10 04:19 PM
Sodium	<0.100	0.100	0.300		mg/L	1	03/30/10 04:19 PM
Semivolatiles by GC/MS - Water		**SW8270C**					**Analyst: DO**
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
1,2,4-Trichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
1,2-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
1,3-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
1,4-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 08:43 PM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/31/10 11:37 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-RB-001-0310
Lab ID: 1003170-06
Collection Date: 03/22/10 12:45 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 11:37 PM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
3,3´-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 11:37 PM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 11:37 PM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 11:37 PM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/31/10 11:37 PM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:37 PM
Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Benzoic acid	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:37 PM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 11:37 PM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-RB-001-0310
Lab ID: 1003170-06
Collection Date: 03/22/10 12:45 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	03/31/10 11:37 PM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:37 PM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:37 PM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:37 PM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	04/01/10 08:43 PM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:37 PM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 11:37 PM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 08:43 PM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	03/31/10 11:37 PM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	03/31/10 11:37 PM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 08:43 PM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 08:43 PM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/31/10 11:37 PM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	03/31/10 11:37 PM
Surr: 2,4,6-Tribromophenol	86.5	0	42 - 124		%REC	1	03/31/10 11:37 PM
Surr: 2,4,6-Tribromophenol	78.8	0	42 - 124		%REC	1	04/01/10 08:43 PM
Surr: 2-Fluorobiphenyl	78.8	0	50 - 110		%REC	1	03/31/10 11:37 PM
Surr: 2-Fluorobiphenyl	68.0	0	50 - 110		%REC	1	04/01/10 08:43 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-RB-001-0310
Lab ID: 1003170-06
Collection Date: 03/22/10 12:45 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	41.0	0	20 - 110		%REC	1	04/01/10 08:43 PM
Surr: 2-Fluorophenol	46.2	0	20 - 110		%REC	1	03/31/10 11:37 PM
Surr: 4-Terphenyl-d14	96.5	0	51 - 135		%REC	1	03/31/10 11:37 PM
Surr: 4-Terphenyl-d14	81.8	0	51 - 135		%REC	1	04/01/10 08:43 PM
Surr: Nitrobenzene-d5	80.2	0	41 - 110		%REC	1	03/31/10 11:37 PM
Surr: Nitrobenzene-d5	71.2	0	41 - 110		%REC	1	04/01/10 08:43 PM
Surr: Phenol-d6	30.0	0	20 - 115		%REC	1	03/31/10 11:37 PM
Surr: Phenol-d6	27.8	0	20 - 115		%REC	1	04/01/10 08:43 PM
8260 Water Volatiles by GC/MS		**SW8260B**					**Analyst: AJR**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:28 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:28 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:28 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/25/10 07:28 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:28 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/25/10 07:28 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:28 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:28 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:28 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:28 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:28 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 07:28 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-RB-001-0310
Lab ID: 1003170-06
Collection Date: 03/22/10 12:45 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:28 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 07:28 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:28 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 07:28 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/25/10 07:28 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:28 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:28 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 07:28 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 07:28 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 07:28 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:28 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/25/10 07:28 PM
Surr: 1,2-Dichloroethane-d4	107	0	70 - 120		%REC	1	03/25/10 07:28 PM
Surr: 4-Bromofluorobenzene	105	0	75 - 120		%REC	1	03/25/10 07:28 PM
Surr: Dibromofluoromethane	103	0	85 - 115		%REC	1	03/25/10 07:28 PM
Surr: Toluene-d8	97.3	0	85 - 120		%REC	1	03/25/10 07:28 PM
Anions by IC method - Water		**E300**					**Analyst: JBC**
Chloride	<0.300	0.300	1.00		mg/L	1	03/23/10 02:53 PM
Sulfate	<1.00	1.00	3.00		mg/L	1	03/23/10 02:53 PM
Alkalinity		**M2320 B**					**Analyst: JBC**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 02:01 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 02:01 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 02:01 PM
Alkalinity, Total (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 02:01 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: 04/05/10

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-RB-001-0310
Lab ID: 1003170-06
Collection Date: 03/22/10 12:45 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
pH		**M4500-H+ B**					**Analyst: JBC**
pH	8.38	0	0		pH Units	1	03/23/10 11:35 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	1.97	0.300	1.00		mg/L	1	03/24/10 03:09 PM

Qualifiers:

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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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-029-0310
Lab ID: 1003170-07
Collection Date: 03/19/10 12:33 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH Extractable by GC - Water		**M8015D**					**Analyst: AV**
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	03/24/10 09:49 AM
Surr: Isopropylbenzene	62.7	0	60 - 140		%REC	1	03/24/10 09:49 AM
Surr: Octacosane	84.3	0	51 - 124		%REC	1	03/24/10 09:49 AM
Method 8015 Gasoline (GRO)		**M8015V**					**Analyst: DEW**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/23/10 06:10 PM
Surr: Tetrachlorethene	102	0	74 - 138		%REC	1	03/23/10 06:10 PM
Mercury Filtered (0.45µ)		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:28 PM
Total Mercury: Aqueous		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:54 PM
Dissolved Metals-ICPMS (0.45µ)		**SW6020**					**Analyst: CZ**
Arsenic	0.00980	0.00200	0.00600		mg/L	1	03/29/10 05:14 PM
Barium	0.0105	0.00300	0.0100		mg/L	1	03/29/10 05:14 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 05:14 PM
Calcium	452	10.0	30.0		mg/L	100	03/29/10 01:52 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/29/10 05:14 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 05:14 PM
Magnesium	610	10.0	30.0		mg/L	100	03/29/10 01:52 PM
Potassium	51.9	10.0	30.0		mg/L	100	03/29/10 01:52 PM
Selenium	0.0853	0.00200	0.00600		mg/L	1	03/29/10 05:14 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/29/10 05:14 PM
Sodium	2200	10.0	30.0		mg/L	100	03/29/10 01:52 PM
Trace Metals: ICP-MS - Water		**SW6020**					**Analyst: KL**
Arsenic	0.0102	0.00200	0.00600		mg/L	1	03/29/10 02:29 PM
Barium	0.0102	0.00300	0.0100		mg/L	1	03/29/10 02:29 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 02:29 PM
Calcium	444	10.0	30.0		mg/L	100	03/31/10 12:34 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/29/10 02:29 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 02:29 PM
Magnesium	614	10.0	30.0		mg/L	100	03/31/10 12:34 PM
Potassium	52.6	10.0	30.0		mg/L	100	03/31/10 12:34 PM
Selenium	0.0852	0.00200	0.00600		mg/L	1	03/29/10 02:29 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/29/10 02:29 PM
Sodium	2260	10.0	30.0		mg/L	100	03/31/10 12:34 PM
Semivolatiles by GC/MS - Water		**SW8270C**					**Analyst: DO**
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
1,2,4-Trichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
1,2-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
1,3-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
1,4-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 09:09 PM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 12:01 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-029-0310
Lab ID: 1003170-07
Collection Date: 03/19/10 12:33 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	04/01/10 12:01 AM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
3,3´-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	04/01/10 12:01 AM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	04/01/10 12:01 AM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	04/01/10 12:01 AM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	04/01/10 12:01 AM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:01 AM
Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Benzoic acid	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:01 AM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	04/01/10 12:01 AM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-029-0310
Lab ID: 1003170-07
Collection Date: 03/19/10 12:33 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	04/01/10 12:01 AM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:01 AM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:01 AM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:01 AM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	04/01/10 09:09 PM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:01 AM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:01 AM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 09:09 PM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	04/01/10 12:01 AM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	04/01/10 12:01 AM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 09:09 PM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:09 PM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:01 AM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	04/01/10 12:01 AM
Surr: 2,4,6-Tribromophenol	79.2	0	42 - 124		%REC	1	04/01/10 12:01 AM
Surr: 2,4,6-Tribromophenol	72.0	0	42 - 124		%REC	1	04/01/10 09:09 PM
Surr: 2-Fluorobiphenyl	75.2	0	50 - 110		%REC	1	04/01/10 12:01 AM
Surr: 2-Fluorobiphenyl	65.5	0	50 - 110		%REC	1	04/01/10 09:09 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-029-0310
Lab ID: 1003170-07
Collection Date: 03/19/10 12:33 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	39.8	0	20 - 110		%REC	1	04/01/10 09:09 PM
Surr: 2-Fluorophenol	44.2	0	20 - 110		%REC	1	04/01/10 12:01 AM
Surr: 4-Terphenyl-d14	93.0	0	51 - 135		%REC	1	04/01/10 12:01 AM
Surr: 4-Terphenyl-d14	79.0	0	51 - 135		%REC	1	04/01/10 09:09 PM
Surr: Nitrobenzene-d5	79.5	0	41 - 110		%REC	1	04/01/10 12:01 AM
Surr: Nitrobenzene-d5	68.0	0	41 - 110		%REC	1	04/01/10 09:09 PM
Surr: Phenol-d6	29.0	0	20 - 115		%REC	1	04/01/10 12:01 AM
Surr: Phenol-d6	27.8	0	20 - 115		%REC	1	04/01/10 09:09 PM
8260 Water Volatiles by GC/MS		**SW8260B**					**Analyst: AJR**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:53 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:53 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:53 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/25/10 07:53 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 07:53 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/25/10 07:53 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:53 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:53 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:53 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:53 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:53 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 07:53 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-029-0310
Lab ID: 1003170-07
Collection Date: 03/19/10 12:33 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:53 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 07:53 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:53 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 07:53 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/25/10 07:53 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 07:53 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 07:53 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 07:53 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 07:53 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 07:53 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 07:53 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/25/10 07:53 PM
Surr: 1,2-Dichloroethane-d4	107	0	70 - 120		%REC	1	03/25/10 07:53 PM
Surr: 4-Bromofluorobenzene	103	0	75 - 120		%REC	1	03/25/10 07:53 PM
Surr: Dibromofluoromethane	102	0	85 - 115		%REC	1	03/25/10 07:53 PM
Surr: Toluene-d8	95.6	0	85 - 120		%REC	1	03/25/10 07:53 PM
Anions by IC method - Water		**E300**					**Analyst: JBC**
Chloride	1280	30.0	100		mg/L	100	03/23/10 03:04 PM
Sulfate	7170	100	300		mg/L	100	03/23/10 03:04 PM
Alkalinity		**M2320 B**					**Analyst: JBC**
Alkalinity, Bicarbonate (As CaCO3)	225	10.0	20.0		mg/L	1	03/23/10 02:07 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 02:07 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 02:07 PM
Alkalinity, Total (As CaCO3)	225	10.0	20.0		mg/L	1	03/23/10 02:07 PM

Qualifiers:

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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: 04/05/10

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-029-0310
Lab ID: 1003170-07
Collection Date: 03/19/10 12:33 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.53	0	0		pH Units	1	03/23/10 11:36 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	2.30	0.300	1.00		mg/L	1	03/24/10 03:26 PM

Qualifiers:

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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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-034-0310
Lab ID: 1003170-08
Collection Date: 03/19/10 10:10 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH Extractable by GC - Water		**M8015D**					**Analyst: AV**
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	03/24/10 11:26 AM
Surr: Isopropylbenzene	52.8	0	60 - 140	S	%REC	1	03/24/10 11:26 AM
Surr: Octacosane	85.5	0	51 - 124		%REC	1	03/24/10 11:26 AM
Method 8015 Gasoline (GRO)		**M8015V**					**Analyst: DEW**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/23/10 06:32 PM
Surr: Tetrachlorethene	106	0	74 - 138		%REC	1	03/23/10 06:32 PM
Mercury Filtered (0.45µ)		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:30 PM
Total Mercury: Aqueous		**SW7470A**					**Analyst: LM**
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/26/10 02:57 PM
Dissolved Metals-ICPMS (0.45µ)		**SW6020**					**Analyst: CZ**
Arsenic	0.0112	0.00200	0.00600		mg/L	1	03/29/10 05:08 PM
Barium	0.0167	0.00300	0.0100		mg/L	1	03/29/10 05:08 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 05:08 PM
Calcium	433	10.0	30.0		mg/L	100	03/29/10 03:04 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/29/10 05:08 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/29/10 05:08 PM
Magnesium	519	10.0	30.0		mg/L	100	03/29/10 03:04 PM
Potassium	50.8	10.0	30.0		mg/L	100	03/29/10 03:04 PM
Selenium	0.0142	0.00200	0.00600		mg/L	1	03/29/10 05:08 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/29/10 05:08 PM
Sodium	2240	10.0	30.0		mg/L	100	03/29/10 03:04 PM
Trace Metals: ICP-MS - Water		**SW6020**					**Analyst: KL**
Arsenic	0.0122	0.00200	0.00600		mg/L	1	03/30/10 08:54 PM
Barium	0.0160	0.00300	0.0100		mg/L	1	03/30/10 08:54 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/30/10 08:54 PM
Calcium	413	10.0	30.0		mg/L	100	03/30/10 03:01 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/31/10 01:45 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/30/10 08:54 PM
Magnesium	482	10.0	30.0		mg/L	100	03/30/10 03:01 PM
Potassium	50.6	10.0	30.0		mg/L	100	03/30/10 03:01 PM
Selenium	0.0125	0.00200	0.00600		mg/L	1	03/31/10 01:45 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/30/10 08:54 PM
Sodium	2140	10.0	30.0		mg/L	100	03/30/10 03:01 PM
Semivolatiles by GC/MS - Water		**SW8270C**					**Analyst: DO**
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
1,2,4-Trichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
1,2-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
1,3-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
1,4-Dichlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 09:34 PM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 12:25 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-034-0310
Lab ID: 1003170-08
Collection Date: 03/19/10 10:10 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	04/01/10 12:25 AM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
3,3´-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	04/01/10 12:25 AM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	04/01/10 12:25 AM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	04/01/10 12:25 AM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	04/01/10 12:25 AM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:25 AM
Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Benzoic acid	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:25 AM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	04/01/10 12:25 AM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-034-0310
Lab ID: 1003170-08
Collection Date: 03/19/10 10:10 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	04/01/10 12:25 AM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:25 AM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:25 AM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:25 AM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	04/01/10 09:34 PM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:25 AM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 12:25 AM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	04/01/10 09:34 PM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	04/01/10 12:25 AM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	04/01/10 12:25 AM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	04/01/10 09:34 PM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 09:34 PM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	04/01/10 12:25 AM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	04/01/10 12:25 AM
Surr: 2,4,6-Tribromophenol	78.5	0	42 - 124		%REC	1	04/01/10 12:25 AM
Surr: 2,4,6-Tribromophenol	71.2	0	42 - 124		%REC	1	04/01/10 09:34 PM
Surr: 2-Fluorobiphenyl	68.3	0	50 - 110		%REC	1	04/01/10 12:25 AM
Surr: 2-Fluorobiphenyl	60.8	0	50 - 110		%REC	1	04/01/10 09:34 PM

Qualifiers:

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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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-034-0310
Lab ID: 1003170-08
Collection Date: 03/19/10 10:10 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	40.8	0	20 - 110		%REC	1	04/01/10 09:34 PM
Surr: 2-Fluorophenol	46.2	0	20 - 110		%REC	1	04/01/10 12:25 AM
Surr: 4-Terphenyl-d14	96.0	0	51 - 135		%REC	1	04/01/10 12:25 AM
Surr: 4-Terphenyl-d14	80.8	0	51 - 135		%REC	1	04/01/10 09:34 PM
Surr: Nitrobenzene-d5	71.5	0	41 - 110		%REC	1	04/01/10 12:25 AM
Surr: Nitrobenzene-d5	63.0	0	41 - 110		%REC	1	04/01/10 09:34 PM
Surr: Phenol-d6	33.8	0	20 - 115		%REC	1	04/01/10 12:25 AM
Surr: Phenol-d6	29.5	0	20 - 115		%REC	1	04/01/10 09:34 PM
8260 Water Volatiles by GC/MS		**SW8260B**					**Analyst: AJR**
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 08:18 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 08:18 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 08:18 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/25/10 08:18 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/25/10 08:18 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/25/10 08:18 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 08:18 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 08:18 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 08:18 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 08:18 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 08:18 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 08:18 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM

Qualifiers:

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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 Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-034-0310
Lab ID: 1003170-08
Collection Date: 03/19/10 10:10 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 08:18 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
Hexachlorobutadiene	<0.00100	0.00100	0.00300		mg/L	1	03/25/10 08:18 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 08:18 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 08:18 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/25/10 08:18 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
Naphthalene	<0.00500	0.00500	0.0150		mg/L	1	03/25/10 08:18 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/25/10 08:18 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 08:18 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 08:18 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/25/10 08:18 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/25/10 08:18 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/25/10 08:18 PM
Surr: 1,2-Dichloroethane-d4	107	0	70 - 120		%REC	1	03/25/10 08:18 PM
Surr: 4-Bromofluorobenzene	104	0	75 - 120		%REC	1	03/25/10 08:18 PM
Surr: Dibromofluoromethane	104	0	85 - 115		%REC	1	03/25/10 08:18 PM
Surr: Toluene-d8	97.2	0	85 - 120		%REC	1	03/25/10 08:18 PM
Anions by IC method - Water		**E300**					**Analyst: JBC**
Chloride	955	30.0	100		mg/L	100	03/23/10 03:28 PM
Sulfate	7680	100	300		mg/L	100	03/23/10 03:28 PM
Alkalinity		**M2320 B**					**Analyst: JBC**
Alkalinity, Bicarbonate (As CaCO3)	179	10.0	20.0		mg/L	1	03/23/10 02:12 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 02:12 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/23/10 02:12 PM
Alkalinity, Total (As CaCO3)	179	10.0	20.0		mg/L	1	03/23/10 02:12 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: 04/05/10

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill Groundwater
Project No:
Lab Order: 1003170

Client Sample ID: HLSF-3839-HMW-034-0310
Lab ID: 1003170-08
Collection Date: 03/19/10 10:10 AM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
pH		**M4500-H+ B**					**Analyst: JBC**
pH	7.31	0	0		pH Units	1	03/23/10 11:39 AM
Total Organic Carbon		**M5310C**					**Analyst: TGK**
Total Organic Carbon	2.23	0.300	1.00		mg/L	1	03/24/10 02:18 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
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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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_100324B

Sample ID:	**LCS-40143**	**Batch ID:**	**40143**		**TestNo:**		**M8015D**			**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**GC15_100324B**		**Analysis Date:**		**03/24/10 08:38 AM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		1.06	0.100	1.250	0	84.6	50	114			
Surr: Isopropylbenzene		0.0832		0.1500		55.5	60	140			S
Surr: Octacosane		0.124		0.1500		82.6	51	124			

Sample ID:	**MB-40143**	**Batch ID:**	**40143**		**TestNo:**		**M8015D**			**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**GC15_100324B**		**Analysis Date:**		**03/24/10 09:05 AM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		<0.0500	0.100								
Surr: Isopropylbenzene		0.0692		0.1500		46.1	60	140			S
Surr: Octacosane		0.114		0.1500		76.2	51	124			

Sample ID:	**1003170-06H-MS**	**Batch ID:**	**40143**		**TestNo:**		**M8015D**			**Units:**	**mg/L**
SampType:	**MS**	**Run ID:**	**GC15_100324B**		**Analysis Date:**		**03/24/10 10:07 AM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		1.16	0.100	1.250	0	92.8	50	114			
Surr: Isopropylbenzene		0.0898		0.1500		59.9	60	140			S
Surr: Octacosane		0.131		0.1500		87.2	51	124			

Sample ID:	**1003170-06H-MSD**	**Batch ID:**	**40143**		**TestNo:**		**M8015D**			**Units:**	**mg/L**
SampType:	**MSD**	**Run ID:**	**GC15_100324B**		**Analysis Date:**		**03/24/10 10:16 AM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		1.11	0.100	1.250	0	88.4	50	114	4.85	30	
Surr: Isopropylbenzene		0.0880		0.1500		58.7	60	140	0	0	S
Surr: Octacosane		0.128		0.1500		85.1	51	124	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_100324B

Sample ID:	**ICV-100324**	**Batch ID:**	**R48516**		**TestNo:**		**M8015D**		**Units:**		**mg/L**
SampType:	**ICV**	**Run ID:**	**GC15_100324B**		**Analysis Date:**		**03/24/10 08:16 AM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		525	0.100	500.0	0	105	85	115			
Surr: Isopropylbenzene		25.6		25.00		103	80	120			
Surr: Octacosane		23.2		25.00		92.7	80	120			

Sample ID:	**CCV1-100324**	**Batch ID:**	**R48516**		**TestNo:**		**M8015D**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**GC15_100324B**		**Analysis Date:**		**03/24/10 10:43 AM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		279	0.100	250.0	0	112	85	115			
Surr: Isopropylbenzene		13.8		12.50		110	80	120			
Surr: Octacosane		12.4		12.50		99.1	80	120			

Sample ID:	**CCV2-100324**	**Batch ID:**	**R48516**		**TestNo:**		**M8015D**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**GC15_100324B**		**Analysis Date:**		**03/24/10 12:54 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
TPH-DRO C10-C28		277	0.100	250.0	0	111	85	115			
Surr: Isopropylbenzene		13.7		12.50		110	80	120			
Surr: Octacosane		12.3		12.50		98.5	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_100323A

Sample ID:	**LCS-40142**	**Batch ID:**	**40142**		**TestNo:**		**M8015V**			**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**GC4_100323A**		**Analysis Date:**		**03/23/10 03:12 PM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Gasoline Range Organics		5.08	0.100	5.000	0	102	67	136			
Surr: Tetrachlorethene		0.421		0.4000		105	74	138			

Sample ID:	**MB-40142**	**Batch ID:**	**40142**		**TestNo:**		**M8015V**			**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**GC4_100323A**		**Analysis Date:**		**03/23/10 03:55 PM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Gasoline Range Organics		<0.0600	0.100								
Surr: Tetrachlorethene		0.445		0.4000		111	74	138			

Sample ID:	**1003170-08BMS**	**Batch ID:**	**40142**		**TestNo:**		**M8015V**			**Units:**	**mg/L**
SampType:	**MS**	**Run ID:**	**GC4_100323A**		**Analysis Date:**		**03/23/10 06:54 PM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Gasoline Range Organics		4.79	0.100	5.000	0	95.9	67	136			
Surr: Tetrachlorethene		0.391		0.4000		97.7	74	138			

Sample ID:	**1003170-08BMSD**	**Batch ID:**	**40142**		**TestNo:**		**M8015V**			**Units:**	**mg/L**
SampType:	**MSD**	**Run ID:**	**GC4_100323A**		**Analysis Date:**		**03/23/10 07:16 PM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Gasoline Range Organics		4.69	0.100	5.000	0	93.8	67	136	2.24	30	
Surr: Tetrachlorethene		0.379		0.4000		94.7	74	138	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_100323A

Sample ID:	**ICV-100323**	**Batch ID:**	**R48497**		**TestNo:**		**M8015V**		**Units:**		**mg/L**
SampType:	**ICV**	**Run ID:**	**GC4_100323A**		**Analysis Date:**		**03/23/10 02:49 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Gasoline Range Organics		9.87	0.100	10.00	0	98.7	80	120			
Surr: Tetrachlorethene		0.423		0.4000		106	74	138			

Sample ID:	**CCV1-100323**	**Batch ID:**	**R48497**		**TestNo:**		**M8015V**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**GC4_100323A**		**Analysis Date:**		**03/23/10 07:38 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Gasoline Range Organics		4.88	0.100	5.000	0	97.7	80	120			
Surr: Tetrachlorethene		0.393		0.4000		98.3	74	138			

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC_HG_100326C

Sample ID:	**1003170-06D SD**	**Batch ID:**	**40155**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**SD**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 02:07 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0	0.00100	0	0				0	10	

Sample ID:	**1003170-06D PDS**	**Batch ID:**	**40155**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**PDS**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 02:09 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00218	0.000200	0.00250	0	87.2	85	115			

Sample ID:	**1003170-06D MS**	**Batch ID:**	**40155**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**MS**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 02:11 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00199	0.000200	0.00200	0	99.5	80	120			

Sample ID:	**1003170-06D MSD**	**Batch ID:**	**40155**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**MSD**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 02:13 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00193	0.000200	0.00200	0	96.5	80	120	3.06	15	

Sample ID:	**MB-40155**	**Batch ID:**	**40155**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**MBLK**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 01:38 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		<0.0000600	0.000200								

Sample ID:	**LCS-40155**	**Batch ID:**	**40155**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**LCS**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 01:49 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00194	0.000200	0.00200	0	97.0	85	115			

Sample ID:	**LCSD-40155**	**Batch ID:**	**40155**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**LCSD**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 01:51 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00187	0.000200	0.00200	0	93.5	85	115	3.67	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC_HG_100326C

Sample ID:	**MB-40156**	**Batch ID:**	**40156**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**MBLK**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 01:40 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		<0.0000600	0.000200								

Sample ID:	**LCS-40156**	**Batch ID:**	**40156**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**LCS**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 01:53 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00185	0.000200	0.00200	0	92.5	85	115			

Sample ID:	**LCSD-40156**	**Batch ID:**	**40156**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**LCSD**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 01:55 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00190	0.000200	0.00200	0	95.0	85	115	2.67	15	

Sample ID:	**1003170-06E SD**	**Batch ID:**	**40156**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**SD**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 02:34 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0	0.00100	0	0				0	10	

Sample ID:	**1003170-06E MS**	**Batch ID:**	**40156**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**MS**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 02:38 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00195	0.000200	0.00200	0	97.5	80	120			

Sample ID:	**1003170-06E MSD**	**Batch ID:**	**40156**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**MSD**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 02:40 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00202	0.000200	0.00200	0	101	80	120	3.53	15	

Sample ID:	**1003170-06E PDS**	**Batch ID:**	**40156**		**TestNo:**		**SW7470A**		**Units:**		**mg/L**
SampType:	**PDS**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 03:38 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00280	0.000200	0.00250	0	112	85	115			

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC_HG_100326C

Sample ID:	**ICV-100326**	**Batch ID:**	**R48562**		**TestNo:**		**SW7470A**			**Units:**	**mg/L**
SampType:	**ICV**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 01:34 PM**			**Prep Date:**	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00377	0.000200	0.00400	0	94.2	90	110			

Sample ID:	**CCV1-100326**	**Batch ID:**	**R48562**		**TestNo:**		**SW7470A**			**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 01:59 PM**			**Prep Date:**	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00210	0.000200	0.00200	0	105	90	110			

Sample ID:	**CCV2-100326**	**Batch ID:**	**R48562**		**TestNo:**		**SW7470A**			**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 02:23 PM**			**Prep Date:**	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00214	0.000200	0.00200	0	107	90	110			

Sample ID:	**CCV3-100326**	**Batch ID:**	**R48562**		**TestNo:**		**SW7470A**			**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 02:48 PM**			**Prep Date:**	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00216	0.000200	0.00200	0	108	90	110			

Sample ID:	**CCV4-100326**	**Batch ID:**	**R48562**		**TestNo:**		**SW7470A**			**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 03:11 PM**			**Prep Date:**	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00211	0.000200	0.00200	0	106	90	110			

Sample ID:	**CCV5-100326**	**Batch ID:**	**R48562**		**TestNo:**		**SW7470A**			**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**CETAC_HG_100326C**		**Analysis Date:**		**03/26/10 03:40 PM**			**Prep Date:**	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00218	0.000200	0.00200	0	109	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_100329B

Sample ID:	**MB-40148**	**Batch ID:**	**40148**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**ICP-MS2_100329B**	**Analysis Date:**	**03/29/10 12:52 PM**	**Prep Date:**	**03/24/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	<0.00200	0.00600								
Barium	<0.00300	0.0100								
Cadmium	<0.000300	0.00100								
Chromium	<0.00200	0.00600								
Lead	<0.000300	0.00100								
Selenium	<0.00200	0.00600								
Silver	<0.000600	0.00200								

Sample ID:	**LCS-40148**	**Batch ID:**	**40148**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**ICP-MS2_100329B**	**Analysis Date:**	**03/29/10 12:58 PM**	**Prep Date:**	**03/24/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	0.197	0.00600	0.200	0	98.7	80	120			
Barium	0.193	0.0100	0.200	0	96.6	80	120			
Cadmium	0.191	0.00100	0.200	0	95.7	80	120			
Chromium	0.195	0.00600	0.200	0	97.4	80	120			
Lead	0.196	0.00100	0.200	0	98.0	80	120			
Selenium	0.199	0.00600	0.200	0	99.4	80	120			
Silver	0.190	0.00200	0.200	0	95.1	80	120			

Sample ID:	**LCSD-40148**	**Batch ID:**	**40148**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**LCSD**	**Run ID:**	**ICP-MS2_100329B**	**Analysis Date:**	**03/29/10 01:03 PM**	**Prep Date:**	**03/24/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	0.197	0.00600	0.200	0	98.3	80	120	0.406	15	
Barium	0.197	0.0100	0.200	0	98.4	80	120	1.79	15	
Cadmium	0.196	0.00100	0.200	0	98.1	80	120	2.48	15	
Chromium	0.195	0.00600	0.200	0	97.5	80	120	0.103	15	
Lead	0.198	0.00100	0.200	0	99.2	80	120	1.22	15	
Selenium	0.203	0.00600	0.200	0	102	80	120	2.29	15	
Silver	0.195	0.00200	0.200	0	97.7	80	120	2.70	15	

Sample ID:	**1003170-07E SD**	**Batch ID:**	**40148**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**SD**	**Run ID:**	**ICP-MS2_100329B**	**Analysis Date:**	**03/29/10 02:35 PM**	**Prep Date:**	**03/24/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	0	0.0300	0	0.0102				0	10	
Barium	0	0.0500	0	0.0102				0	10	
Cadmium	0	0.00500	0	0				0	10	
Chromium	0	0.0300	0	0				0	10	
Lead	0	0.00500	0	0				0	10	
Selenium	0.0735	0.0300	0	0.0852				14.7	10	R
Silver	0	0.0100	0	0				0	10	

Sample ID:	**1003170-07E PDS**	**Batch ID:**	**40148**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**PDS**	**Run ID:**	**ICP-MS2_100329B**	**Analysis Date:**	**03/29/10 02:40 PM**	**Prep Date:**	**03/24/10**

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_100329B

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Arsenic	0.228	0.00600	0.200	0.0102	109	75	125			
Barium	0.196	0.0100	0.200	0.0102	93.0	75	125			
Cadmium	0.177	0.00100	0.200	0	88.6	75	125			
Chromium	0.164	0.00600	0.200	0	81.8	75	125			
Lead	0.190	0.00100	0.200	0	95.2	75	125			
Selenium	0.329	0.00600	0.200	0.0852	122	75	125			
Silver	0.177	0.00200	0.200	0	88.3	75	125			

Sample ID: 1003170-07E MS **Batch ID:** 40148 **TestNo:** SW6020 **Units:** mg/L
SampType: MS **Run ID:** ICP-MS2_100329B **Analysis Date:** 03/29/10 02:45 PM **Prep Date:** 03/24/10

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Arsenic	0.237	0.00600	0.200	0.0102	113	80	120			
Barium	0.202	0.0100	0.200	0.0102	95.7	80	120			
Cadmium	0.184	0.00100	0.200	0	91.9	80	120			
Chromium	0.170	0.00600	0.200	0	84.8	80	120			
Lead	0.196	0.00100	0.200	0	98.2	80	120			
Selenium	0.326	0.00600	0.200	0.0852	120	80	120			
Silver	0.182	0.00200	0.200	0	91.0	80	120			

Sample ID: 1003170-07E MSD **Batch ID:** 40148 **TestNo:** SW6020 **Units:** mg/L
SampType: MSD **Run ID:** ICP-MS2_100329B **Analysis Date:** 03/29/10 02:51 PM **Prep Date:** 03/24/10

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Arsenic	0.231	0.00600	0.200	0.0102	110	80	120	2.74	15	
Barium	0.201	0.0100	0.200	0.0102	95.6	80	120	0.099	15	
Cadmium	0.186	0.00100	0.200	0	92.8	80	120	0.921	15	
Chromium	0.168	0.00600	0.200	0	83.8	80	120	1.13	15	
Lead	0.197	0.00100	0.200	0	98.3	80	120	0.153	15	
Selenium	0.342	0.00600	0.200	0.0852	128	80	120	4.70	15	S
Silver	0.183	0.00200	0.200	0	91.6	80	120	0.658	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_100329B

Sample ID:	**ICV1-100329**	**Batch ID:**	**R48586**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**ICV**	**Run ID:**	**ICP-MS2_100329B**	**Analysis Date:**	**03/29/10 11:09 AM**	**Prep Date:**	

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	0.100	0.00600	0.100	0	100	90	110			
Barium	0.0970	0.0100	0.100	0	97.0	90	110			
Cadmium	0.0964	0.00100	0.100	0	96.4	90	110			
Chromium	0.0972	0.00600	0.100	0	97.2	90	110			
Lead	0.100	0.00100	0.100	0	100	90	110			
Selenium	0.100	0.00600	0.100	0	100	90	110			
Silver	0.0991	0.00200	0.100	0	99.1	90	110			

Sample ID:	**CCV1-100329**	**Batch ID:**	**R48586**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS2_100329B**	**Analysis Date:**	**03/29/10 12:08 PM**	**Prep Date:**	

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	0.201	0.00600	0.200	0	100	90	110			
Barium	0.201	0.0100	0.200	0	100	90	110			
Cadmium	0.200	0.00100	0.200	0	100	90	110			
Chromium	0.199	0.00600	0.200	0	99.6	90	110			
Lead	0.201	0.00100	0.200	0	101	90	110			
Selenium	0.200	0.00600	0.200	0	100	90	110			
Silver	0.197	0.00200	0.200	0	98.4	90	110			

Sample ID:	**CCV2-100329**	**Batch ID:**	**R48586**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS2_100329B**	**Analysis Date:**	**03/29/10 02:56 PM**	**Prep Date:**	

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	0.190	0.00600	0.200	0	94.8	90	110			
Barium	0.190	0.0100	0.200	0	94.8	90	110			
Cadmium	0.189	0.00100	0.200	0	94.5	90	110			
Chromium	0.186	0.00600	0.200	0	93.0	90	110			
Lead	0.201	0.00100	0.200	0	101	90	110			
Selenium	0.206	0.00600	0.200	0	103	90	110			
Silver	0.193	0.00200	0.200	0	96.5	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_100330B

Sample ID:	**MB-40148**	**Batch ID:**	**40148**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**MBLK**	**Run ID:**	**ICP-MS2_100330B**		**Analysis Date:**		**03/30/10 02:11 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Calcium		<0.100	0.300								
Magnesium		<0.100	0.300								
Potassium		<0.100	0.300								
Sodium		<0.100	0.300								

Sample ID:	**LCS-40148**	**Batch ID:**	**40148**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**LCS**	**Run ID:**	**ICP-MS2_100330B**		**Analysis Date:**		**03/30/10 02:17 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Calcium		4.91	0.300	5.00	0	98.1	80	120			
Magnesium		4.88	0.300	5.00	0	97.5	80	120			
Potassium		5.09	0.300	5.00	0	102	80	120			
Sodium		4.89	0.300	5.00	0	97.8	80	120			

Sample ID:	**LCSD-40148**	**Batch ID:**	**40148**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**LCSD**	**Run ID:**	**ICP-MS2_100330B**		**Analysis Date:**		**03/30/10 02:22 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Calcium		4.96	0.300	5.00	0	99.2	80	120	1.05	15	
Magnesium		4.86	0.300	5.00	0	97.3	80	120	0.226	15	
Potassium		5.04	0.300	5.00	0	101	80	120	0.967	15	
Sodium		4.88	0.300	5.00	0	97.7	80	120	0.164	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_100330B

Sample ID:	**ICV1-100330**	**Batch ID:**	**R48627**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**ICV**	**Run ID:**	**ICP-MS2_100330B**		**Analysis Date:**		**03/30/10 11:59 AM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic		0.100	0.00600	0.100	0	100	90	110			
Barium		0.0955	0.0100	0.100	0	95.5	90	110			
Cadmium		0.0947	0.00100	0.100	0	94.6	90	110			
Calcium		2.48	0.300	2.50	0	99.1	90	110			
Chromium		0.0934	0.00600	0.100	0	93.4	90	110			
Lead		0.0974	0.00100	0.100	0	97.4	90	110			
Magnesium		2.44	0.300	2.50	0	97.4	90	110			
Potassium		2.62	0.300	2.50	0	105	90	110			
Selenium		0.102	0.00600	0.100	0	102	90	110			
Silver		0.0984	0.00200	0.100	0	98.4	90	110			
Sodium		2.44	0.300	2.50	0	97.8	90	110			

Sample ID:	**CCV1-100330**	**Batch ID:**	**R48627**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS2_100330B**		**Analysis Date:**		**03/30/10 01:38 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Calcium		4.96	0.300	5.00	0	99.1	90	110			
Magnesium		4.88	0.300	5.00	0	97.6	90	110			
Potassium		5.07	0.300	5.00	0	101	90	110			
Sodium		4.97	0.300	5.00	0	99.4	90	110			

Sample ID:	**CCV2-100330**	**Batch ID:**	**R48627**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS2_100330B**		**Analysis Date:**		**03/30/10 03:34 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic		0.198	0.00600	0.200	0	99.0	90	110			
Barium		0.192	0.0100	0.200	0	96.0	90	110			
Cadmium		0.194	0.00100	0.200	0	97.0	90	110			
Calcium		4.81	0.300	5.00	0	96.3	90	110			
Chromium		0.193	0.00600	0.200	0	96.5	90	110			
Lead		0.196	0.00100	0.200	0	98.2	90	110			
Magnesium		4.79	0.300	5.00	0	95.9	90	110			
Potassium		4.98	0.300	5.00	0	99.5	90	110			
Selenium		0.197	0.00600	0.200	0	98.6	90	110			
Silver		0.196	0.00200	0.200	0	97.9	90	110			
Sodium		4.82	0.300	5.00	0	96.4	90	110			

Sample ID:	**CCV3-100330**	**Batch ID:**	**R48627**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS2_100330B**		**Analysis Date:**		**03/30/10 05:09 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic		0.192	0.00600	0.200	0	95.8	90	110			
Barium		0.194	0.0100	0.200	0	96.8	90	110			
Cadmium		0.196	0.00100	0.200	0	98.2	90	110			
Calcium		4.86	0.300	5.00	0	97.3	90	110			
Chromium		0.190	0.00600	0.200	0	95.0	90	110			
Lead		0.195	0.00100	0.200	0	97.6	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_100330B

Magnesium	4.83	0.300	5.00	0	96.6	90	110	
Potassium	4.98	0.300	5.00	0	99.6	90	110	
Selenium	0.198	0.00600	0.200	0	99.0	90	110	
Silver	0.196	0.00200	0.200	0	98.0	90	110	
Sodium	4.82	0.300	5.00	0	96.5	90	110	

Sample ID:	**CCV5-100330**	**Batch ID:**	**R48627**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS2_100330B**		**Analysis Date:**		**03/30/10 08:04 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic		0.203	0.00600	0.200	0	101	90	110			
Barium		0.193	0.0100	0.200	0	96.6	90	110			
Cadmium		0.193	0.00100	0.200	0	96.6	90	110			
Lead		0.195	0.00100	0.200	0	97.4	90	110			
Silver		0.195	0.00200	0.200	0	97.5	90	110			

Sample ID:	**CCV6-100330**	**Batch ID:**	**R48627**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS2_100330B**		**Analysis Date:**		**03/30/10 08:59 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic		0.192	0.00600	0.200	0	96.2	90	110			
Barium		0.187	0.0100	0.200	0	93.6	90	110			
Cadmium		0.188	0.00100	0.200	0	93.9	90	110			
Lead		0.194	0.00100	0.200	0	96.8	90	110			
Silver		0.192	0.00200	0.200	0	96.0	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_100331A

Sample ID:	**1003170-07E SD**	**Batch ID:**	**40148**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**SD**	**Run ID:**	**ICP-MS2_100331A**		**Analysis Date:**		**03/31/10 12:45 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Calcium		444	150	0	444				0.101	10	
Magnesium		635	150	0	614				3.30	10	
Potassium		56.4	150	0	52.6				6.99	10	
Sodium		2330	150	0	2260				3.01	10	

Sample ID:	**1003170-07E PDS**	**Batch ID:**	**40148**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**PDS**	**Run ID:**	**ICP-MS2_100331A**		**Analysis Date:**		**03/31/10 12:50 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Calcium		944	30.0	500	444	99.9	75	125			
Magnesium		1120	30.0	500	614	102	75	125			
Potassium		569	30.0	500	52.6	103	75	125			
Sodium		2810	30.0	500	2260	111	75	125			

Sample ID:	**1003170-07E MS**	**Batch ID:**	**40148**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**MS**	**Run ID:**	**ICP-MS2_100331A**		**Analysis Date:**		**03/31/10 12:56 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Calcium		434	30.0	5.00	444	-208	80	120			S
Magnesium		621	30.0	5.00	614	138	80	120			S
Potassium		56.5	30.0	5.00	52.6	78.4	80	120			S
Sodium		2270	30.0	5.00	2260	200	80	120			S

Sample ID:	**1003170-07E MSD**	**Batch ID:**	**40148**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**MSD**	**Run ID:**	**ICP-MS2_100331A**		**Analysis Date:**		**03/31/10 01:01 PM**		**Prep Date:**		**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Calcium		432	30.0	5.00	444	-236	80	120	0.323	15	S
Magnesium		619	30.0	5.00	614	86.0	80	120	0.419	15	
Potassium		55.1	30.0	5.00	52.6	49.6	80	120	2.58	15	S
Sodium		2280	30.0	5.00	2260	480	80	120	0.615	15	S

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_100331A

Sample ID:	**ICV1-100331**	**Batch ID:**	**R48637**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**ICV**	**Run ID:**	**ICP-MS2_100331A**		**Analysis Date:**		**03/31/10 11:48 AM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic		0.0991	0.00600	0.100	0	99.1	90	110			
Cadmium		0.0951	0.00100	0.100	0	95.1	90	110			
Calcium		2.55	0.300	2.50	0	102	90	110			
Chromium		0.0958	0.00600	0.100	0	95.8	90	110			
Lead		0.0958	0.00100	0.100	0	95.8	90	110			
Magnesium		2.51	0.300	2.50	0	100	90	110			
Potassium		2.59	0.300	2.50	0	103	90	110			
Selenium		0.0973	0.00600	0.100	0	97.3	90	110			
Sodium		2.49	0.300	2.50	0	99.5	90	110			

Sample ID:	**CCV1-100331**	**Batch ID:**	**R48637**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS2_100331A**		**Analysis Date:**		**03/31/10 01:07 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Calcium		4.86	0.300	5.00	0	97.2	90	110			
Chromium		0.200	0.00600	0.200	0	100	90	110			
Lead		0.193	0.00100	0.200	0	96.6	90	110			
Magnesium		4.89	0.300	5.00	0	97.9	90	110			
Potassium		4.85	0.300	5.00	0	97.1	90	110			
Selenium		0.190	0.00600	0.200	0	94.8	90	110			
Sodium		4.92	0.300	5.00	0	98.4	90	110			

Sample ID:	**CCV2-100331**	**Batch ID:**	**R48637**		**TestNo:**		**SW6020**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS2_100331A**		**Analysis Date:**		**03/31/10 01:50 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic		0.193	0.00600	0.200	0	96.5	90	110			
Chromium		0.195	0.00600	0.200	0	97.4	90	110			
Lead		0.193	0.00100	0.200	0	96.6	90	110			
Selenium		0.198	0.00600	0.200	0	98.9	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_100329B

Sample ID:	**MB-40153**	**Batch ID:**	**40153**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**ICP-MS3_100329B**	**Analysis Date:**	**03/29/10 01:11 PM**	**Prep Date:**	**03/24/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	<0.00200	0.00600								
Barium	<0.00300	0.0100								
Cadmium	<0.000300	0.00100								
Calcium	<0.100	0.300								
Chromium	<0.00200	0.00600								
Lead	<0.000300	0.00100								
Magnesium	<0.100	0.300								
Potassium	<0.100	0.300								
Selenium	<0.00200	0.00600								
Silver	<0.000600	0.00200								
Sodium	<0.100	0.300								

Sample ID:	**LCS-40153**	**Batch ID:**	**40153**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**ICP-MS3_100329B**	**Analysis Date:**	**03/29/10 01:17 PM**	**Prep Date:**	**03/24/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	0.197	0.00600	0.200	0	98.6	80	120			
Barium	0.196	0.0100	0.200	0	98.2	80	120			
Cadmium	0.199	0.00100	0.200	0	99.3	80	120			
Calcium	5.19	0.300	5.00	0	104	80	120			
Chromium	0.201	0.00600	0.200	0	100	80	120			
Lead	0.204	0.00100	0.200	0	102	80	120			
Magnesium	5.21	0.300	5.00	0	104	80	120			
Potassium	5.22	0.300	5.00	0	104	80	120			
Selenium	0.206	0.00600	0.200	0	103	80	120			
Silver	0.192	0.00200	0.200	0	95.8	80	120			
Sodium	5.24	0.300	5.00	0	105	80	120			

Sample ID:	**LCSD-40153**	**Batch ID:**	**40153**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**LCSD**	**Run ID:**	**ICP-MS3_100329B**	**Analysis Date:**	**03/29/10 01:22 PM**	**Prep Date:**	**03/24/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	0.197	0.00600	0.200	0	98.4	80	120	0.152	15	
Barium	0.198	0.0100	0.200	0	99.2	80	120	0.962	15	
Cadmium	0.197	0.00100	0.200	0	98.6	80	120	0.758	15	
Calcium	5.22	0.300	5.00	0	104	80	120	0.692	15	
Chromium	0.202	0.00600	0.200	0	101	80	120	0.893	15	
Lead	0.204	0.00100	0.200	0	102	80	120	0.196	15	
Magnesium	5.21	0.300	5.00	0	104	80	120	0	15	
Potassium	5.23	0.300	5.00	0	105	80	120	0.191	15	
Selenium	0.207	0.00600	0.200	0	103	80	120	0.631	15	
Silver	0.194	0.00200	0.200	0	96.8	80	120	0.986	15	
Sodium	5.24	0.300	5.00	0	105	80	120	0.115	15	

Sample ID:	**1003170-07D SD**	**Batch ID:**	**40153**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**SD**	**Run ID:**	**ICP-MS3_100329B**	**Analysis Date:**	**03/29/10 01:57 PM**	**Prep Date:**	**03/24/10**

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_100329B

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Calcium	409	150	0	452				9.93	10	
Magnesium	650	150	0	610				6.43	10	
Potassium	51.8	150	0	51.9				0.057	10	
Sodium	2340	150	0	2200				6.27	10	

Sample ID: 1003170-07D PDS **Batch ID:** 40153 **TestNo:** SW6020 **Units:** mg/L
SampType: PDS **Run ID:** ICP-MS3_100329B **Analysis Date:** 03/29/10 02:03 PM **Prep Date:** 03/24/10

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Calcium	998	30.0	500	452	109	75	125			
Magnesium	1160	30.0	500	610	110	75	125			
Potassium	576	30.0	500	51.9	105	75	125			
Sodium	2830	30.0	500	2200	128	75	125			S

Sample ID: 1003170-07D MS **Batch ID:** 40153 **TestNo:** SW6020 **Units:** mg/L
SampType: MS **Run ID:** ICP-MS3_100329B **Analysis Date:** 03/29/10 02:08 PM **Prep Date:** 03/24/10

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Calcium	453	30.0	5.00	452	12.0	80	120			S
Magnesium	615	30.0	5.00	610	116	80	120			
Potassium	56.8	30.0	5.00	51.9	98.8	80	120			
Sodium	2190	30.0	5.00	2200	-40.0	80	120			S

Sample ID: 1003170-07D MSD **Batch ID:** 40153 **TestNo:** SW6020 **Units:** mg/L
SampType: MSD **Run ID:** ICP-MS3_100329B **Analysis Date:** 03/29/10 02:14 PM **Prep Date:** 03/24/10

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Calcium	450	30.0	5.00	452	-46.0	80	120	0.643	15	S
Magnesium	617	30.0	5.00	610	156	80	120	0.325	15	S
Potassium	56.4	30.0	5.00	51.9	90.4	80	120	0.742	15	
Sodium	2170	30.0	5.00	2200	-520	80	120	1.10	15	S

Sample ID: 1003170-07D SD **Batch ID:** 40153 **TestNo:** SW6020 **Units:** mg/L
SampType: SD **Run ID:** ICP-MS3_100329B **Analysis Date:** 03/29/10 05:19 PM **Prep Date:** 03/24/10

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Arsenic	0.0102	0.0300	0	0.00980				4.52	10	
Barium	0	0.0500	0	0.0105				0	10	
Cadmium	0	0.00500	0	0				0	10	
Chromium	0	0.0300	0	0				0	10	
Lead	0	0.00500	0	0				0	10	
Selenium	0.0766	0.0300	0	0.0853				10.8	10	R
Silver	0	0.0100	0	0				0	10	

Sample ID: 1003170-07D PDS **Batch ID:** 40153 **TestNo:** SW6020 **Units:** mg/L
SampType: PDS **Run ID:** ICP-MS3_100329B **Analysis Date:** 03/29/10 05:25 PM **Prep Date:** 03/24/10

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Arsenic	0.214	0.00600	0.200	0.00980	102	75	125			
Barium	0.210	0.0100	0.200	0.0105	99.8	75	125			
Cadmium	0.176	0.00100	0.200	0	88.1	75	125			

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_100329B

Chromium	0.174	0.00600	0.200	0	87.2	75	125
Lead	0.202	0.00100	0.200	0	101	75	125
Selenium	0.315	0.00600	0.200	0.0853	115	75	125
Silver	0.166	0.00200	0.200	0	83.0	75	125

Sample ID:	**1003170-07D MS**	**Batch ID:**	**40153**	**TestNo:**	**SW6020**	**Units:**	**mg/L**		
SampType:	**MS**	**Run ID:**	**ICP-MS3_100329B**	**Analysis Date:**	**03/29/10 05:30 PM**	**Prep Date:**	**03/24/10**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic		0.212	0.00600	0.200	0.00980	101	80	120			
Barium		0.215	0.0100	0.200	0.0105	102	80	120			
Cadmium		0.182	0.00100	0.200	0	91.0	80	120			
Chromium		0.177	0.00600	0.200	0	88.6	80	120			
Lead		0.204	0.00100	0.200	0	102	80	120			
Selenium		0.313	0.00600	0.200	0.0853	114	80	120			
Silver		0.171	0.00200	0.200	0	85.7	80	120			

Sample ID:	**1003170-07D MSD**	**Batch ID:**	**40153**	**TestNo:**	**SW6020**	**Units:**	**mg/L**				
SampType:	**MSD**	**Run ID:**	**ICP-MS3_100329B**	**Analysis Date:**	**03/29/10 05:36 PM**	**Prep Date:**	**03/24/10**				
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic		0.214	0.00600	0.200	0.00980	102	80	120	1.36	15	
Barium		0.215	0.0100	0.200	0.0105	102	80	120	0.046	15	
Cadmium		0.183	0.00100	0.200	0	91.7	80	120	0.821	15	
Chromium		0.182	0.00600	0.200	0	91.0	80	120	2.73	15	
Lead		0.205	0.00100	0.200	0	102	80	120	0.391	15	
Selenium		0.313	0.00600	0.200	0.0853	114	80	120	0.063	15	
Silver		0.173	0.00200	0.200	0	86.5	80	120	0.929	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_100329B

Sample ID:	**ICV1-100329**	**Batch ID:**	**R48577**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**ICV**	**Run ID:**	**ICP-MS3_100329B**	**Analysis Date:**	**03/29/10 10:55 AM**	**Prep Date:**	

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	0.0981	0.00600	0.100	0	98.1	90	110			
Barium	0.0984	0.0100	0.100	0	98.4	90	110			
Cadmium	0.0962	0.00100	0.100	0	96.2	90	110			
Calcium	2.57	0.300	2.50	0	103	90	110			
Chromium	0.100	0.00600	0.100	0	100	90	110			
Lead	0.103	0.00100	0.100	0	103	90	110			
Magnesium	2.57	0.300	2.50	0	103	90	110			
Potassium	2.62	0.300	2.50	0	105	90	110			
Selenium	0.0996	0.00600	0.100	0	99.6	90	110			
Silver	0.0979	0.00200	0.100	0	97.9	90	110			
Sodium	2.57	0.300	2.50	0	103	90	110			

Sample ID:	**CCV1-100329**	**Batch ID:**	**R48577**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS3_100329B**	**Analysis Date:**	**03/29/10 12:59 PM**	**Prep Date:**	

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	0.194	0.00600	0.200	0	96.9	90	110			
Barium	0.198	0.0100	0.200	0	99.0	90	110			
Cadmium	0.200	0.00100	0.200	0	99.8	90	110			
Calcium	5.20	0.300	5.00	0	104	90	110			
Chromium	0.201	0.00600	0.200	0	100	90	110			
Lead	0.203	0.00100	0.200	0	102	90	110			
Magnesium	5.16	0.300	5.00	0	103	90	110			
Potassium	5.15	0.300	5.00	0	103	90	110			
Selenium	0.202	0.00600	0.200	0	101	90	110			
Silver	0.192	0.00200	0.200	0	96.2	90	110			
Sodium	5.24	0.300	5.00	0	105	90	110			

Sample ID:	**CCV2-100329**	**Batch ID:**	**R48577**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS3_100329B**	**Analysis Date:**	**03/29/10 02:20 PM**	**Prep Date:**	

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Arsenic	0.195	0.00600	0.200	0	97.3	90	110			
Barium	0.201	0.0100	0.200	0	101	90	110			
Cadmium	0.201	0.00100	0.200	0	101	90	110			
Calcium	5.20	0.300	5.00	0	104	90	110			
Chromium	0.199	0.00600	0.200	0	99.3	90	110			
Lead	0.205	0.00100	0.200	0	102	90	110			
Magnesium	5.17	0.300	5.00	0	103	90	110			
Potassium	5.16	0.300	5.00	0	103	90	110			
Selenium	0.203	0.00600	0.200	0	101	90	110			
Silver	0.195	0.00200	0.200	0	97.6	90	110			
Sodium	5.21	0.300	5.00	0	104	90	110			

Sample ID:	**CCV3-100329**	**Batch ID:**	**R48577**	**TestNo:**	**SW6020**	**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**ICP-MS3_100329B**	**Analysis Date:**	**03/29/10 03:26 PM**	**Prep Date:**	

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_100329B

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Arsenic	0.192	0.00600	0.200	0	96.2	90	110			
Barium	0.198	0.0100	0.200	0	99.2	90	110			
Cadmium	0.197	0.00100	0.200	0	98.7	90	110			
Calcium	5.10	0.300	5.00	0	102	90	110			
Chromium	0.196	0.00600	0.200	0	97.8	90	110			
Lead	0.203	0.00100	0.200	0	101	90	110			
Magnesium	5.05	0.300	5.00	0	101	90	110			
Potassium	5.04	0.300	5.00	0	101	90	110			
Selenium	0.201	0.00600	0.200	0	101	90	110			
Silver	0.193	0.00200	0.200	0	96.4	90	110			
Sodium	5.15	0.300	5.00	0	103	90	110			

Sample ID: CCV4-100329 **Batch ID:** R48577 **TestNo:** SW6020 **Units:** mg/L
SampType: CCV **Run ID:** ICP-MS3_100329B **Analysis Date:** 03/29/10 04:27 PM **Prep Date:**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Arsenic	0.188	0.00600	0.200	0	94.2	90	110			
Barium	0.199	0.0100	0.200	0	99.4	90	110			
Cadmium	0.198	0.00100	0.200	0	98.9	90	110			
Chromium	0.194	0.00600	0.200	0	96.8	90	110			
Lead	0.203	0.00100	0.200	0	101	90	110			
Selenium	0.197	0.00600	0.200	0	98.4	90	110			
Silver	0.193	0.00200	0.200	0	96.5	90	110			

Sample ID: CCV5-100329 **Batch ID:** R48577 **TestNo:** SW6020 **Units:** mg/L
SampType: CCV **Run ID:** ICP-MS3_100329B **Analysis Date:** 03/29/10 05:41 PM **Prep Date:**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Arsenic	0.198	0.00600	0.200	0	99.2	90	110			
Barium	0.200	0.0100	0.200	0	99.8	90	110			
Cadmium	0.196	0.00100	0.200	0	97.8	90	110			
Chromium	0.192	0.00600	0.200	0	96.0	90	110			
Lead	0.204	0.00100	0.200	0	102	90	110			
Selenium	0.206	0.00600	0.200	0	103	90	110			
Silver	0.191	0.00200	0.200	0	95.6	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100331A

Sample ID:	**LCS-40157**	**Batch ID:**	**40157**	**TestNo:**	**SW8270C**	**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**GCMS4_100331A**	**Analysis Date:**	**03/31/10 05:19 PM**	**Prep Date:**	**03/24/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
1,2,4,5-Tetrachlorobenzene	0.00800	0.000800	0.00800	0	100	35	120			
1,2,4-Trichlorobenzene	0.00428	0.000800	0.00800	0	53.5	35	105			
1,2-Dichlorobenzene	0.00416	0.000800	0.00800	0	52.0	35	100			
1,2-Diphenylhydrazine	0.00676	0.000800	0.00800	0	84.5	55	115			
1,3-Dichlorobenzene	0.00384	0.000800	0.00800	0	48.0	30	100			
1,4-Dichlorobenzene	0.00404	0.000800	0.00800	0	50.5	30	100			
1-Methylnaphthalene	0.00640	0.000800	0.00800	0	80.0	45	125			N
2,4,5-Trichlorophenol	0.00644	0.000800	0.00800	0	80.5	50	110			
2,4,6-Trichlorophenol	0.00612	0.000800	0.00800	0	76.5	50	115			
2,4-Dichlorophenol	0.00580	0.000800	0.00800	0	72.5	50	105			
2,4-Dimethylphenol	0.00732	0.000800	0.00800	0	91.5	30	110			
2,4-Dinitrophenol	0.00608	0.00400	0.00800	0	76.0	15	140			
2,4-Dinitrotoluene	0.00724	0.000800	0.00800	0	90.5	50	120			
2,6-Dichlorophenol	0.00576	0.000800	0.00800	0	72.0	35	120			
2,6-Dinitrotoluene	0.00680	0.000800	0.00800	0	85.0	50	115			
2-Chloronaphthalene	0.00548	0.000800	0.00800	0	68.5	50	105			
2-Chlorophenol	0.00500	0.000800	0.00800	0	62.5	35	105			
2-Methylnaphthalene	0.00532	0.000800	0.00800	0	66.5	45	105			
2-Methylphenol	0.00512	0.000800	0.00800	0	64.0	40	110			
2-Nitroaniline	0.00680	0.000800	0.00800	0	85.0	50	115			
2-Nitrophenol	0.00576	0.000800	0.00800	0	72.0	40	115			
3,3´-Dichlorobenzidine	0.00812	0.00400	0.00800	0	102	20	110			
3-Nitroaniline	0.00684	0.000800	0.00800	0	85.5	20	125			
4,6-Dinitro-2-methylphenol	0.00652	0.00200	0.00800	0	81.5	40	130			
4-Bromophenyl phenyl ether	0.00628	0.000800	0.00800	0	78.5	50	115			
4-Chloro-3-methylphenol	0.00648	0.000800	0.00800	0	81.0	45	110			
4-Chloroaniline	0.00620	0.00200	0.00800	0	77.5	15	110			
4-Chlorophenyl phenyl ether	0.00596	0.000800	0.00800	0	74.5	50	110			
4-Methylphenol	0.00476	0.000800	0.00800	0	59.5	30	110			
4-Nitroaniline	0.00724	0.000800	0.00800	0	90.5	35	120			
4-Nitrophenol	0.00348	0.00400	0.00800	0	43.5	20	120			
Acenaphthene	0.00592	0.000800	0.00800	0	74.0	45	110			
Acenaphthylene	0.00592	0.000800	0.00800	0	74.0	50	105			
Acetophenone	0.00536	0.000800	0.00800	0	67.0	45	125			
Aniline	0.00524	0.000800	0.00800	0	65.5	10	140			
Anthracene	0.00676	0.000800	0.00800	0	84.5	55	110			
Benzidine	0.00352	0.00600	0.00800	0	44.0	20	125			
Benzo[a]anthracene	0.00760	0.000800	0.00800	0	95.0	55	110			
Benzo[a]pyrene	0.00720	0.000800	0.00800	0	90.0	55	110			
Benzo[b]fluoranthene	0.00660	0.000800	0.00800	0	82.5	45	120			
Benzo[g,h,i]perylene	0.00732	0.000800	0.00800	0	91.5	40	125			
Benzo[k]fluoranthene	0.00788	0.000800	0.00800	0	98.5	45	125			
Benzoic acid	0.00184	0.00600	0.00800	0	23.0	5	120			
Benzyl alcohol	0.00528	0.00200	0.00800	0	66.0	30	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100331A

Biphenyl	0.00560	0.000800	0.00800	0	70.0	45	125
Bis(2-chloroethoxy)methane	0.00588	0.000800	0.00800	0	73.5	45	105
Bis(2-chloroethyl)ether	0.00512	0.000800	0.00800	0	64.0	35	110
Bis(2-chloroisopropyl)ether	0.00560	0.000800	0.00800	0	70.0	25	130
Bis(2-ethylhexyl)phthalate	0.00716	0.00300	0.00800	0	89.5	40	125
Butyl benzyl phthalate	0.00740	0.00600	0.00800	0	92.5	45	115
Carbazole	0.00724	0.000800	0.00800	0	90.5	50	115
Chrysene	0.00748	0.000800	0.00800	0	93.5	55	110
Di-n-butyl phthalate	0.00788	0.00600	0.00800	0	98.5	55	115
Di-n-octyl phthalate	0.00704	0.00600	0.00800	0	88.0	35	135
Dibenz[a,h]anthracene	0.00728	0.000800	0.00800	0	91.0	40	125
Dibenzofuran	0.00604	0.000800	0.00800	0	75.5	55	105
Diethyl phthalate	0.00724	0.00600	0.00800	0	90.5	40	120
Dimethyl phthalate	0.00668	0.00600	0.00800	0	83.5	25	125
Fluoranthene	0.00732	0.000800	0.00800	0	91.5	55	115
Fluorene	0.00608	0.000800	0.00800	0	76.0	50	110
Hexachlorobenzene	0.00632	0.000800	0.00800	0	79.0	50	110
Hexachlorobutadiene	0.00356	0.000800	0.00800	0	44.5	25	105
Hexachlorocyclopentadiene	0.00412	0.00200	0.00800	0	51.5	25	125
Hexachloroethane	0.00356	0.000800	0.00800	0	44.5	30	100
Indeno[1,2,3-cd]pyrene	0.00724	0.000800	0.00800	0	90.5	45	125
Isophorone	0.00680	0.000800	0.00800	0	85.0	50	110
N-Nitrosodi-n-propylamine	0.00588	0.000800	0.00800	0	73.5	35	130
N-Nitrosodimethylamine	0.00324	0.000800	0.00800	0	40.5	25	110
N-Nitrosodiphenylamine	0.00648	0.000800	0.00800	0	81.0	50	110
Naphthalene	0.00528	0.000800	0.00800	0	66.0	40	100
Nitrobenzene	0.00584	0.000800	0.00800	0	73.0	45	110
Pentachlorobenzene	0.00908	0.000800	0.00800	0	114	35	120
Pentachlorophenol	0.00732	0.000800	0.00800	0	91.5	40	115
Phenanthrene	0.00664	0.000800	0.00800	0	83.0	50	115
Phenol	0.00272	0.000800	0.00800	0	34.0	20	115
Pyrene	0.00724	0.000800	0.00800	0	90.5	50	130
Pyridine	0.00288	0.00200	0.00800	0	36.0	20	110
Surr: 2,4,6-Tribromophenol	16.4		16.00		103	42	124
Surr: 2-Fluorobiphenyl	13.6		16.00		84.8	50	110
Surr: 2-Fluorophenol	8.32		16.00		52.0	20	110
Surr: 4-Terphenyl-d14	18.1		16.00		113	51	135
Surr: Nitrobenzene-d5	13.9		16.00		86.8	41	110
Surr: Phenol-d6	5.80		16.00		36.2	20	115

Sample ID:	**1003170-06G-MS**	**Batch ID:**	**40157**	**TestNo:**	**SW8270C**	**Units:**	**mg/L**
SampType:	**MS**	**Run ID:**	**GCMS4_100331A**	**Analysis Date:**	**03/31/10 06:11 PM**	**Prep Date:**	**03/24/10**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,2,4,5-Tetrachlorobenzene	0.0141	0.000800	0.0160	0	88.0	35	120			
1,2,4-Trichlorobenzene	0.00428	0.000800	0.00800	0	53.5	35	105			
1,2-Dichlorobenzene	0.00396	0.000800	0.00800	0	49.5	35	100			
1,2-Diphenylhydrazine	0.00672	0.000800	0.00800	0	84.0	55	115			

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100331A

1,3-Dichlorobenzene	0.00376	0.000800	0.00800	0	47.0	30	100	
1,4-Dichlorobenzene	0.00392	0.000800	0.00800	0	49.0	30	100	
1-Methylnaphthalene	0.00628	0.000800	0.00800	0	78.5	45	125	N
2,4,5-Trichlorophenol	0.00652	0.000800	0.00800	0	81.5	50	110	
2,4,6-Trichlorophenol	0.00640	0.000800	0.00800	0	80.0	50	115	
2,4-Dichlorophenol	0.00580	0.000800	0.00800	0	72.5	50	105	
2,4-Dimethylphenol	0.00700	0.000800	0.00800	0	87.5	30	110	
2,4-Dinitrophenol	0.00656	0.00400	0.00800	0	82.0	15	140	
2,4-Dinitrotoluene	0.00708	0.000800	0.00800	0	88.5	50	120	
2,6-Dichlorophenol	0.00572	0.000800	0.00800	0	71.5	35	120	
2,6-Dinitrotoluene	0.00672	0.000800	0.00800	0	84.0	50	115	
2-Chloronaphthalene	0.00636	0.000800	0.00800	0	79.5	50	105	
2-Chlorophenol	0.00488	0.000800	0.00800	0	61.0	35	105	
2-Methylnaphthalene	0.00528	0.000800	0.00800	0	66.0	45	105	
2-Methylphenol	0.00496	0.000800	0.00800	0	62.0	40	110	
2-Nitroaniline	0.00664	0.000800	0.00800	0	83.0	50	115	
2-Nitrophenol	0.00572	0.000800	0.00800	0	71.5	40	115	
3,3´-Dichlorobenzidine	0.00688	0.00400	0.00800	0	86.0	20	110	
3-Nitroaniline	0.00680	0.000800	0.00800	0	85.0	20	125	
4,6-Dinitro-2-methylphenol	0.00676	0.00200	0.00800	0	84.5	40	130	
4-Bromophenyl phenyl ether	0.00616	0.000800	0.00800	0	77.0	50	115	
4-Chloro-3-methylphenol	0.00640	0.000800	0.00800	0	80.0	45	110	
4-Chloroaniline	0.00608	0.00200	0.00800	0	76.0	15	110	
4-Chlorophenyl phenyl ether	0.00604	0.000800	0.00800	0	75.5	50	110	
4-Methylphenol	0.00468	0.000800	0.00800	0	58.5	30	110	
4-Nitroaniline	0.00704	0.000800	0.00800	0	88.0	35	120	
4-Nitrophenol	0.00372	0.00400	0.00800	0	46.5	20	120	
Acenaphthene	0.00592	0.000800	0.00800	0	74.0	45	110	
Acenaphthylene	0.00596	0.000800	0.00800	0	74.5	50	105	
Acetophenone	0.00988	0.000800	0.00800	0	124	45	125	
Aniline	0.00492	0.000800	0.00800	0	61.5	10	140	
Anthracene	0.00652	0.000800	0.00800	0	81.5	55	110	
Benzidine	0.00216	0.00600	0.00800	0	27.0	20	125	
Benzo[a]anthracene	0.00740	0.000800	0.00800	0	92.5	55	110	
Benzo[a]pyrene	0.00696	0.000800	0.00800	0	87.0	55	110	
Benzo[b]fluoranthene	0.00720	0.000800	0.00800	0	90.0	45	120	
Benzo[g,h,i]perylene	0.00720	0.000800	0.00800	0	90.0	40	125	
Benzo[k]fluoranthene	0.00744	0.000800	0.00800	0	93.0	45	125	
Benzoic acid	0.00192	0.00600	0.00800	0	24.0	5	120	
Benzyl alcohol	0.00476	0.00200	0.00800	0	59.5	30	110	
Biphenyl	0.00552	0.000800	0.00800	0	69.0	45	125	
Bis(2-chloroethoxy)methane	0.00572	0.000800	0.00800	0	71.5	45	105	
Bis(2-chloroethyl)ether	0.00512	0.000800	0.00800	0	64.0	35	110	
Bis(2-chloroisopropyl)ether	0.00540	0.000800	0.00800	0	67.5	25	130	
Bis(2-ethylhexyl)phthalate	0.00728	0.00300	0.00800	0	91.0	40	125	
Butyl benzyl phthalate	0.00736	0.00600	0.00800	0	92.0	45	115	
Carbazole	0.00692	0.000800	0.00800	0	86.5	50	115	

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100331A

Chrysene	0.00720	0.000800	0.00800	0	90.0	55	110
Di-n-butyl phthalate	0.00748	0.00600	0.00800	0	93.5	55	115
Di-n-octyl phthalate	0.00692	0.00600	0.00800	0	86.5	35	135
Dibenz[a,h]anthracene	0.00700	0.000800	0.00800	0	87.5	40	125
Dibenzofuran	0.00616	0.000800	0.00800	0	77.0	55	105
Diethyl phthalate	0.00724	0.00600	0.00800	0	90.5	40	120
Dimethyl phthalate	0.00660	0.00600	0.00800	0	82.5	25	125
Fluoranthene	0.00688	0.000800	0.00800	0	86.0	55	115
Fluorene	0.00624	0.000800	0.00800	0	78.0	50	110
Hexachlorobenzene	0.00616	0.000800	0.00800	0	77.0	50	110
Hexachlorobutadiene	0.00376	0.000800	0.00800	0	47.0	25	105
Hexachlorocyclopentadiene	0.00460	0.00200	0.00800	0	57.5	25	125
Hexachloroethane	0.00368	0.000800	0.00800	0	46.0	30	100
Indeno[1,2,3-cd]pyrene	0.00704	0.000800	0.00800	0	88.0	45	125
Isophorone	0.00652	0.000800	0.00800	0	81.5	50	110
N-Nitrosodi-n-propylamine	0.00556	0.000800	0.00800	0	69.5	35	130
N-Nitrosodimethylamine	0.00332	0.000800	0.00800	0	41.5	25	110
N-Nitrosodiphenylamine	0.0134	0.000800	0.0160	0	83.5	50	110
Naphthalene	0.00524	0.000800	0.00800	0	65.5	40	100
Nitrobenzene	0.00592	0.000800	0.00800	0	74.0	45	110
Pentachlorobenzene	0.0151	0.000800	0.0160	0	94.5	35	120
Pentachlorophenol	0.00756	0.000800	0.00800	0	94.5	40	115
Phenanthrene	0.00632	0.000800	0.00800	0	79.0	50	115
Phenol	0.00260	0.000800	0.00800	0	32.5	20	115
Pyrene	0.00688	0.000800	0.00800	0	86.0	50	130
Pyridine	0.00220	0.00200	0.00800	0	27.5	20	110
Surr: 2,4,6-Tribromophenol	15.8		16.00		98.8	42	124
Surr: 2-Fluorobiphenyl	13.0		16.00		81.3	50	110
Surr: 2-Fluorophenol	8.04		16.00		50.3	20	110
Surr: 4-Terphenyl-d14	16.8		16.00		105	51	135
Surr: Nitrobenzene-d5	13.4		16.00		84.0	41	110
Surr: Phenol-d6	5.60		16.00		35.0	20	115

Sample ID:	**1003170-06G-MSD**	**Batch ID:**	**40157**	**TestNo:**	**SW8270C**	**Units:**	**mg/L**
SampType:	**MSD**	**Run ID:**	**GCMS4_100331A**	**Analysis Date:**	**03/31/10 07:02 PM**	**Prep Date:**	**03/24/10**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,2,4,5-Tetrachlorobenzene	0.0141	0.000800	0.0160	0	88.2	35	120	0.284	30	
1,2,4-Trichlorobenzene	0.00452	0.000800	0.00800	0	56.5	35	105	5.45	30	
1,2-Dichlorobenzene	0.00436	0.000800	0.00800	0	54.5	35	100	9.62	30	
1,2-Diphenylhydrazine	0.00680	0.000800	0.00800	0	85.0	55	115	1.18	30	
1,3-Dichlorobenzene	0.00428	0.000800	0.00800	0	53.5	30	100	12.9	30	
1,4-Dichlorobenzene	0.00432	0.000800	0.00800	0	54.0	30	100	9.71	30	
1-Methylnaphthalene	0.00628	0.000800	0.00800	0	78.5	45	125	0	30	N
2,4,5-Trichlorophenol	0.00664	0.000800	0.00800	0	83.0	50	110	1.82	30	
2,4,6-Trichlorophenol	0.00652	0.000800	0.00800	0	81.5	50	115	1.86	30	
2,4-Dichlorophenol	0.00580	0.000800	0.00800	0	72.5	50	105	0	30	
2,4-Dimethylphenol	0.00780	0.000800	0.00800	0	97.5	30	110	10.8	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100331A

2,4-Dinitrophenol	0.00672	0.00400	0.00800	0	84.0	15	140	2.41	30	
2,4-Dinitrotoluene	0.00716	0.000800	0.00800	0	89.5	50	120	1.12	30	
2,6-Dichlorophenol	0.00580	0.000800	0.00800	0	72.5	35	120	1.39	30	
2,6-Dinitrotoluene	0.00684	0.000800	0.00800	0	85.5	50	115	1.77	30	
2-Chloronaphthalene	0.00648	0.000800	0.00800	0	81.0	50	105	1.87	30	
2-Chlorophenol	0.00520	0.000800	0.00800	0	65.0	35	105	6.35	30	
2-Methylnaphthalene	0.00544	0.000800	0.00800	0	68.0	45	105	2.99	30	
2-Methylphenol	0.00528	0.000800	0.00800	0	66.0	40	110	6.25	30	
2-Nitroaniline	0.00688	0.000800	0.00800	0	86.0	50	115	3.55	30	
2-Nitrophenol	0.00576	0.000800	0.00800	0	72.0	40	115	0.697	30	
3,3´-Dichlorobenzidine	0.00676	0.00400	0.00800	0	84.5	20	110	1.76	30	
3-Nitroaniline	0.00708	0.000800	0.00800	0	88.5	20	125	4.03	30	
4,6-Dinitro-2-methylphenol	0.00716	0.00200	0.00800	0	89.5	40	130	5.75	30	
4-Bromophenyl phenyl ether	0.00632	0.000800	0.00800	0	79.0	50	115	2.56	30	
4-Chloro-3-methylphenol	0.00636	0.000800	0.00800	0	79.5	45	110	0.627	30	
4-Chloroaniline	0.00608	0.00200	0.00800	0	76.0	15	110	0	30	
4-Chlorophenyl phenyl ether	0.00628	0.000800	0.00800	0	78.5	50	110	3.90	30	
4-Methylphenol	0.00496	0.000800	0.00800	0	62.0	30	110	5.81	30	
4-Nitroaniline	0.00732	0.000800	0.00800	0	91.5	35	120	3.90	30	
4-Nitrophenol	0.00380	0.00400	0.00800	0	47.5	20	120	2.13	30	
Acenaphthene	0.00608	0.000800	0.00800	0	76.0	45	110	2.67	30	
Acenaphthylene	0.00600	0.000800	0.00800	0	75.0	50	105	0.669	30	
Acetophenone	0.0105	0.000800	0.00800	0	132	45	125	6.27	30	S
Aniline	0.00520	0.000800	0.00800	0	65.0	10	140	5.53	30	
Anthracene	0.00672	0.000800	0.00800	0	84.0	55	110	3.02	30	
Benzidine	0.000680	0.00600	0.00800	0	8.50	20	125	104	30	SR
Benzo[a]anthracene	0.00752	0.000800	0.00800	0	94.0	55	110	1.61	30	
Benzo[a]pyrene	0.00724	0.000800	0.00800	0	90.5	55	110	3.94	30	
Benzo[b]fluoranthene	0.00756	0.000800	0.00800	0	94.5	45	120	4.88	30	
Benzo[g,h,i]perylene	0.00748	0.000800	0.00800	0	93.5	40	125	3.81	30	
Benzo[k]fluoranthene	0.00728	0.000800	0.00800	0	91.0	45	125	2.17	30	
Benzoic acid	0.00164	0.00600	0.00800	0	20.5	5	120	15.7	30	
Benzyl alcohol	0.00512	0.00200	0.00800	0	64.0	30	110	7.29	30	
Biphenyl	0.00560	0.000800	0.00800	0	70.0	45	125	1.44	30	
Bis(2-chloroethoxy)methane	0.00580	0.000800	0.00800	0	72.5	45	105	1.39	30	
Bis(2-chloroethyl)ether	0.00540	0.000800	0.00800	0	67.5	35	110	5.32	30	
Bis(2-chloroisopropyl)ether	0.00572	0.000800	0.00800	0	71.5	25	130	5.76	30	
Bis(2-ethylhexyl)phthalate	0.00724	0.00300	0.00800	0	90.5	40	125	0.551	30	
Butyl benzyl phthalate	0.00760	0.00600	0.00800	0	95.0	45	115	3.21	30	
Carbazole	0.00712	0.000800	0.00800	0	89.0	50	115	2.85	30	
Chrysene	0.00752	0.000800	0.00800	0	94.0	55	110	4.35	30	
Di-n-butyl phthalate	0.00784	0.00600	0.00800	0	98.0	55	115	4.70	30	
Di-n-octyl phthalate	0.00732	0.00600	0.00800	0	91.5	35	135	5.62	30	
Dibenz[a,h]anthracene	0.00728	0.000800	0.00800	0	91.0	40	125	3.92	30	
Dibenzofuran	0.00628	0.000800	0.00800	0	78.5	55	105	1.93	30	
Diethyl phthalate	0.00748	0.00600	0.00800	0	93.5	40	120	3.26	30	
Dimethyl phthalate	0.00668	0.00600	0.00800	0	83.5	25	125	1.20	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100331A

Fluoranthene	0.00712	0.000800	0.00800	0	89.0	55	115	3.43	30
Fluorene	0.00628	0.000800	0.00800	0	78.5	50	110	0.639	30
Hexachlorobenzene	0.00632	0.000800	0.00800	0	79.0	50	110	2.56	30
Hexachlorobutadiene	0.00412	0.000800	0.00800	0	51.5	25	105	9.14	30
Hexachlorocyclopentadiene	0.00520	0.00200	0.00800	0	65.0	25	125	12.2	30
Hexachloroethane	0.00408	0.000800	0.00800	0	51.0	30	100	10.3	30
Indeno[1,2,3-cd]pyrene	0.00736	0.000800	0.00800	0	92.0	45	125	4.44	30
Isophorone	0.00660	0.000800	0.00800	0	82.5	50	110	1.22	30
N-Nitrosodi-n-propylamine	0.00584	0.000800	0.00800	0	73.0	35	130	4.91	30
N-Nitrosodimethylamine	0.00368	0.000800	0.00800	0	46.0	25	110	10.3	30
N-Nitrosodiphenylamine	0.0139	0.000800	0.0160	0	86.8	50	110	3.82	30
Naphthalene	0.00540	0.000800	0.00800	0	67.5	40	100	3.01	30
Nitrobenzene	0.00600	0.000800	0.00800	0	75.0	45	110	1.34	30
Pentachlorobenzene	0.0156	0.000800	0.0160	0	97.8	35	120	3.38	30
Pentachlorophenol	0.00780	0.000800	0.00800	0	97.5	40	115	3.13	30
Phenanthrene	0.00656	0.000800	0.00800	0	82.0	50	115	3.73	30
Phenol	0.00284	0.000800	0.00800	0	35.5	20	115	8.82	30
Pyrene	0.00684	0.000800	0.00800	0	85.5	50	130	0.583	30
Pyridine	0.00252	0.00200	0.00800	0	31.5	20	110	13.6	30
Surr: 2,4,6-Tribromophenol	16.2		16.00		101	42	124	0	0
Surr: 2-Fluorobiphenyl	13.1		16.00		82.0	50	110	0	0
Surr: 2-Fluorophenol	8.80		16.00		55.0	20	110	0	0
Surr: 4-Terphenyl-d14	17.1		16.00		107	51	135	0	0
Surr: Nitrobenzene-d5	13.5		16.00		84.5	41	110	0	0
Surr: Phenol-d6	5.84		16.00		36.5	20	115	0	0

Sample ID:	**MB-40157**	**Batch ID:**	**40157**	**TestNo:**	**SW8270C**	**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**GCMS4_100331A**	**Analysis Date:**	**03/31/10 08:18 PM**	**Prep Date:**	**03/24/10**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000800								
1,2,4-Trichlorobenzene	<0.000200	0.000800								
1,2-Dichlorobenzene	<0.000200	0.000800								
1,2-Diphenylhydrazine	<0.000200	0.000800								
1,3-Dichlorobenzene	<0.000200	0.000800								
1,4-Dichlorobenzene	<0.000200	0.000800								
1-Methylnaphthalene	<0.000200	0.000800								N
2,4,5-Trichlorophenol	<0.000200	0.000800								
2,4,6-Trichlorophenol	<0.000200	0.000800								
2,4-Dichlorophenol	<0.000200	0.000800								
2,4-Dimethylphenol	<0.000200	0.000800								
2,4-Dinitrophenol	<0.00100	0.00400								
2,4-Dinitrotoluene	<0.000200	0.000800								
2,6-Dichlorophenol	<0.000200	0.000800								
2,6-Dinitrotoluene	<0.000200	0.000800								
2-Chloronaphthalene	<0.000200	0.000800								
2-Chlorophenol	<0.000200	0.000800								
2-Methylnaphthalene	<0.000200	0.000800								

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100331A

2-Methylphenol	<0.000200	0.000800
2-Nitroaniline	<0.000200	0.000800
2-Nitrophenol	<0.000200	0.000800
3,3´-Dichlorobenzidine	<0.00100	0.00400
3-Nitroaniline	<0.000200	0.000800
4,6-Dinitro-2-methylphenol	<0.000600	0.00200
4-Bromophenyl phenyl ether	<0.000200	0.000800
4-Chloro-3-methylphenol	<0.000200	0.000800
4-Chloroaniline	<0.000600	0.00200
4-Chlorophenyl phenyl ether	<0.000200	0.000800
4-Methylphenol	<0.000200	0.000800
4-Nitroaniline	<0.000200	0.000800
4-Nitrophenol	<0.00100	0.00400
Acenaphthene	<0.000200	0.000800
Acenaphthylene	<0.000200	0.000800
Acetophenone	<0.000200	0.000800
Aniline	<0.000200	0.000800
Anthracene	<0.000200	0.000800
Benzidine	<0.00200	0.00600
Benzo[a]anthracene	<0.000200	0.000800
Benzo[a]pyrene	<0.000200	0.000800
Benzo[b]fluoranthene	<0.000200	0.000800
Benzo[g,h,i]perylene	<0.000200	0.000800
Benzo[k]fluoranthene	<0.000200	0.000800
Benzoic acid	<0.00200	0.00600
Benzyl alcohol	<0.000600	0.00200
Biphenyl	<0.000200	0.000800
Bis(2-chloroethoxy)methane	<0.000200	0.000800
Bis(2-chloroethyl)ether	<0.000200	0.000800
Bis(2-chloroisopropyl)ether	<0.000200	0.000800
Bis(2-ethylhexyl)phthalate	<0.00100	0.00300
Butyl benzyl phthalate	<0.00200	0.00600
Carbazole	<0.000200	0.000800
Chrysene	<0.000200	0.000800
Di-n-butyl phthalate	<0.00200	0.00600
Di-n-octyl phthalate	<0.00200	0.00600
Dibenz[a,h]anthracene	<0.000200	0.000800
Dibenzofuran	<0.000200	0.000800
Diethyl phthalate	<0.00200	0.00600
Dimethyl phthalate	<0.00200	0.00600
Fluoranthene	<0.000200	0.000800
Fluorene	<0.000200	0.000800
Hexachlorobenzene	<0.000200	0.000800
Hexachlorobutadiene	<0.000200	0.000800
Hexachlorocyclopentadiene	<0.000600	0.00200
Hexachloroethane	<0.000200	0.000800
Indeno[1,2,3-cd]pyrene	<0.000200	0.000800

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100331A

Isophorone	<0.000200	0.000800				
N-Nitrosodi-n-propylamine	<0.000100	0.000800				
N-Nitrosodimethylamine	<0.000200	0.000800				
N-Nitrosodiphenylamine	<0.000200	0.000800				
Naphthalene	<0.000200	0.000800				
Nitrobenzene	<0.000200	0.000800				
Pentachlorobenzene	<0.000200	0.000800				
Pentachlorophenol	<0.000200	0.000800				
Phenanthrene	<0.000200	0.000800				
Phenol	<0.000200	0.000800				
Pyrene	<0.000200	0.000800				
Pyridine	<0.000800	0.00200				
Surr: 2,4,6-Tribromophenol	12.8		16.00	80.0	42	124
Surr: 2-Fluorobiphenyl	12.1		16.00	75.5	50	110
Surr: 2-Fluorophenol	7.04		16.00	44.0	20	110
Surr: 4-Terphenyl-d14	14.8		16.00	92.2	51	135
Surr: Nitrobenzene-d5	12.4		16.00	77.5	41	110
Surr: Phenol-d6	4.56		16.00	28.5	20	115

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100331A

Sample ID:	**ICV-100331**	**Batch ID:**	**R48640**	**TestNo:**	**SW8270C**	**Units:**	**mg/L**
SampType:	**ICV**	**Run ID:**	**GCMS4_100331A**	**Analysis Date:**	**03/31/10 03:59 PM**	**Prep Date:**	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1,2,4,5-Tetrachlorobenzene	3.81	0.000800	4.00	0	95.2	80	120			
1,2,4-Trichlorobenzene	3.86	0.000800	4.00	0	96.5	80	120			
1,2-Dichlorobenzene	3.74	0.000800	4.00	0	93.5	80	120			
1,2-Diphenylhydrazine	3.90	0.000800	4.00	0	97.5	80	120			
1,3-Dichlorobenzene	3.82	0.000800	4.00	0	95.5	80	120			
1,4-Dichlorobenzene	3.83	0.000800	4.00	0	95.8	80	120			
1-Methylnaphthalene	3.96	0.000800	4.00	0	99.0	80	120			N
2,4,5-Trichlorophenol	3.97	0.000800	4.00	0	99.2	80	120			
2,4,6-Trichlorophenol	3.95	0.000800	4.00	0	98.8	80	120			
2,4-Dichlorophenol	3.79	0.000800	4.00	0	94.8	80	120			
2,4-Dimethylphenol	4.79	0.000800	4.00	0	120	80	120			
2,4-Dinitrophenol	3.98	0.00400	4.00	0	99.5	80	120			
2,4-Dinitrotoluene	4.35	0.000800	4.00	0	109	80	120			
2,6-Dichlorophenol	3.83	0.000800	4.00	0	95.8	80	120			
2,6-Dinitrotoluene	4.20	0.000800	4.00	0	105	80	120			
2-Chloronaphthalene	3.92	0.000800	4.00	0	98.0	80	120			
2-Chlorophenol	3.68	0.000800	4.00	0	92.0	80	120			
2-Methylnaphthalene	3.93	0.000800	4.00	0	98.2	80	120			
2-Methylphenol	3.68	0.000800	4.00	0	92.0	80	120			
2-Nitroaniline	4.04	0.000800	4.00	0	101	80	120			
2-Nitrophenol	3.96	0.000800	4.00	0	99.0	80	120			
3,3´-Dichlorobenzidine	4.40	0.00400	4.00	0	110	80	120			
3-Nitroaniline	4.02	0.000800	4.00	0	101	80	120			
4,6-Dinitro-2-methylphenol	3.91	0.00200	4.00	0	97.8	80	120			
4-Bromophenyl phenyl ether	3.91	0.000800	4.00	0	97.8	80	120			
4-Chloro-3-methylphenol	3.93	0.000800	4.00	0	98.2	80	120			
4-Chloroaniline	3.74	0.00200	4.00	0	93.5	80	120			
4-Chlorophenyl phenyl ether	3.95	0.000800	4.00	0	98.8	80	120			
4-Methylphenol	3.69	0.000800	4.00	0	92.2	80	120			
4-Nitroaniline	4.20	0.000800	4.00	0	105	80	120			
4-Nitrophenol	4.35	0.00400	4.00	0	109	80	120			
Acenaphthene	3.83	0.000800	4.00	0	95.8	80	120			
Acenaphthylene	3.91	0.000800	4.00	0	97.8	80	120			
Acetophenone	3.81	0.000800	4.00	0	95.2	80	120			
Aniline	3.60	0.000800	4.00	0	90.0	80	120			
Anthracene	3.78	0.000800	4.00	0	94.5	80	120			
Benzidine	2.64	0.00600	4.00	0	66.0	80	120			S
Benzo[a]anthracene	4.15	0.000800	4.00	0	104	80	120			
Benzo[a]pyrene	4.03	0.000800	4.00	0	101	80	120			
Benzo[b]fluoranthene	4.12	0.000800	4.00	0	103	80	120			
Benzo[g,h,i]perylene	4.21	0.000800	4.00	0	105	80	120			
Benzo[k]fluoranthene	4.27	0.000800	4.00	0	107	80	120			
Benzoic acid	3.73	0.00600	4.00	0	93.2	80	120			
Benzyl alcohol	3.67	0.00200	4.00	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

Biphenyl	3.85	0.000800	4.00	0	96.2	80	120
Bis(2-chloroethoxy)methane	3.85	0.000800	4.00	0	96.2	80	120
Bis(2-chloroethyl)ether	3.87	0.000800	4.00	0	96.8	80	120
Bis(2-chloroisopropyl)ether	3.90	0.000800	4.00	0	97.5	80	120
Bis(2-ethylhexyl)phthalate	3.91	0.00300	4.00	0	97.8	80	120
Butyl benzyl phthalate	3.94	0.00600	4.00	0	98.5	80	120
Carbazole	3.78	0.000800	4.00	0	94.5	80	120
Chrysene	3.83	0.000800	4.00	0	95.8	80	120
Di-n-butyl phthalate	3.89	0.00600	4.00	0	97.2	80	120
Di-n-octyl phthalate	3.98	0.00600	4.00	0	99.5	80	120
Dibenz[a,h]anthracene	4.24	0.000800	4.00	0	106	80	120
Dibenzofuran	3.84	0.000800	4.00	0	96.0	80	120
Diethyl phthalate	4.22	0.00600	4.00	0	106	80	120
Dimethyl phthalate	3.98	0.00600	4.00	0	99.5	80	120
Fluoranthene	3.89	0.000800	4.00	0	97.2	80	120
Fluorene	3.93	0.000800	4.00	0	98.2	80	120
Hexachlorobenzene	3.88	0.000800	4.00	0	97.0	80	120
Hexachlorobutadiene	3.88	0.000800	4.00	0	97.0	80	120
Hexachlorocyclopentadiene	4.06	0.00200	4.00	0	102	80	120
Hexachloroethane	3.87	0.000800	4.00	0	96.8	80	120
Indeno[1,2,3-cd]pyrene	4.23	0.000800	4.00	0	106	80	120
Isophorone	3.84	0.000800	4.00	0	96.0	80	120
N-Nitrosodi-n-propylamine	3.70	0.000800	4.00	0	92.5	80	120
N-Nitrosodimethylamine	3.98	0.000800	4.00	0	99.5	80	120
N-Nitrosodiphenylamine	3.78	0.000800	4.00	0	94.5	80	120
Naphthalene	4.06	0.000800	4.00	0	102	80	120
Nitrobenzene	3.99	0.000800	4.00	0	99.8	80	120
Pentachlorobenzene	3.78	0.000800	4.00	0	94.5	80	120
Pentachlorophenol	4.49	0.000800	4.00	0	112	80	120
Phenanthrene	3.75	0.000800	4.00	0	93.8	80	120
Phenol	3.68	0.000800	4.00	0	92.0	80	120
Pyrene	3.84	0.000800	4.00	0	96.0	80	120
Pyridine	3.76	0.00200	4.00	0	94.0	80	120
Surr: 2,4,6-Tribromophenol	3940		4000		98.5	80	120
Surr: 2-Fluorobiphenyl	3800		4000		95.0	80	120
Surr: 2-Fluorophenol	3850		4000		96.2	80	120
Surr: 4-Terphenyl-d14	3910		4000		97.8	80	120
Surr: Nitrobenzene-d5	4020		4000		101	80	120
Surr: Phenol-d6	3580		4000		89.5	80	120

CLIENT: Zia Engineering & Environmental
Work Order: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100401A

Sample ID:	**LCS2-40157**	**Batch ID:**	**40157**	**TestNo:**	**SW8270C**	**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**GCMS4_100401A**	**Analysis Date:**	**04/01/10 02:46 PM**	**Prep Date:**	**03/24/10**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1-Chloronaphthalene	0.00632	0.000800	0.00800	0	79.0	45	125			N
1-Naphthylamine	0.00612	0.000800	0.00800	0	76.5	45	125			
2-Naphthylamine	0.00592	0.000800	0.00800	0	74.0	45	125			
2-Picoline	0.00516	0.000800	0.00800	0	64.5	45	125			
3-Methylcholanthrene	0.00776	0.000800	0.00800	0	97.0	45	125			
4-Aminobiphenyl	0.00484	0.000800	0.00800	0	60.5	45	125			
7,12-Dimethylbenz(a)anthracene	0.00876	0.000800	0.00800	0	110	45	125			
Dibenz(a,j)acridine	0.00740	0.00400	0.00800	0	92.5	45	125			N
Dimethylphenethylamine	0.000840	0.00600	0.00800	0	10.5	45	125			S
Diphenylamine	0.00928	0.000800	0.00800	0	116	45	125			
Ethyl methanesulfonate	0.00632	0.000800	0.00800	0	79.0	45	125			
Methyl methanesulfonate	0.00588	0.000800	0.00800	0	73.5	45	125			
N-Nitrosopiperidine	0.00736	0.000800	0.00800	0	92.0	45	125			
p-Dimethylaminoazobenzene	0.00748	0.000800	0.00800	0	93.5	45	125			N
Pentachloronitrobenzene	0.00816	0.000800	0.00800	0	102	45	125			
Phenacetin	0.00772	0.000800	0.00800	0	96.5	45	125			
Pronamide	0.00720	0.000800	0.00800	0	90.0	45	125			
Surr: 2,4,6-Tribromophenol	14.0		16.00		87.3	42	124			
Surr: 2-Fluorobiphenyl	11.4		16.00		71.5	50	110			
Surr: 2-Fluorophenol	9.04		16.00		56.5	20	110			
Surr: 4-Terphenyl-d14	13.0		16.00		81.5	51	135			
Surr: Nitrobenzene-d5	12.6		16.00		79.0	41	110			
Surr: Phenol-d6	7.44		16.00		46.5	20	115			

Sample ID:	**1003170-06G-MS**	**Batch ID:**	**40157**	**TestNo:**	**SW8270C**	**Units:**	**mg/L**
SampType:	**MS**	**Run ID:**	**GCMS4_100401A**	**Analysis Date:**	**04/01/10 03:11 PM**	**Prep Date:**	**03/24/10**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1-Chloronaphthalene	0.00620	0.000800	0.00800	0	77.5	45	125			N
1-Naphthylamine	0.00548	0.000800	0.00800	0	68.5	45	125			
2-Naphthylamine	0.00652	0.000800	0.00800	0	81.5	45	125			
2-Picoline	0.00292	0.000800	0.00800	0	36.5	45	125			S
3-Methylcholanthrene	0.00820	0.000800	0.00800	0	103	45	125			
4-Aminobiphenyl	0.00560	0.000800	0.00800	0	70.0	45	125			
7,12-Dimethylbenz(a)anthracene	0.00804	0.000800	0.00800	0	101	45	125			
Dibenz(a,j)acridine	0.00808	0.00400	0.00800	0	101	45	125			N
Dimethylphenethylamine	0	0.00600	0.00800	0	0	45	125			S
Diphenylamine	0.0135	0.000800	0.0160	0	84.5	45	125			
Ethyl methanesulfonate	0.00532	0.000800	0.00800	0	66.5	45	125			
Methyl methanesulfonate	0.00436	0.000800	0.00800	0	54.5	45	125			
N-Nitrosopiperidine	0.00672	0.000800	0.00800	0	84.0	45	125			
p-Dimethylaminoazobenzene	0.00748	0.000800	0.00800	0	93.5	45	125			N
Pentachloronitrobenzene	0.00812	0.000800	0.00800	0	102	45	125			
Phenacetin	0.00756	0.000800	0.00800	0	94.5	45	125			
Pronamide	0.00724	0.000800	0.00800	0	90.5	45	125			

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100401A

Surr: 2,4,6-Tribromophenol	14.8	16.00	92.8	42	124
Surr: 2-Fluorobiphenyl	11.2	16.00	69.8	50	110
Surr: 2-Fluorophenol	7.44	16.00	46.5	20	110
Surr: 4-Terphenyl-d14	14.4	16.00	89.8	51	135
Surr: Nitrobenzene-d5	11.8	16.00	74.0	41	110
Surr: Phenol-d6	5.20	16.00	32.5	20	115

Sample ID:	**1003170-06G-MSD**	**Batch ID:**	**40157**	**TestNo:**	**SW8270C**	**Units:**	**mg/L**
SampType:	**MSD**	**Run ID:**	**GCMS4_100401A**	**Analysis Date:**	**04/01/10 03:37 PM**	**Prep Date:**	**03/24/10**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1-Chloronaphthalene	0.00628	0.000800	0.00800	0	78.5	45	125	1.28	30	N
1-Naphthylamine	0.00516	0.000800	0.00800	0	64.5	45	125	6.02	30	
2-Naphthylamine	0.00652	0.000800	0.00800	0	81.5	45	125	0	30	
2-Picoline	0.00356	0.000800	0.00800	0	44.5	45	125	19.8	30	
3-Methylcholanthrene	0.00844	0.000800	0.00800	0	106	45	125	2.88	30	
4-Aminobiphenyl	0.00516	0.000800	0.00800	0	64.5	45	125	8.18	30	
7,12-Dimethylbenz(a)anthracene	0.00796	0.000800	0.00800	0	99.5	45	125	1.00	30	
Dibenz(a,j)acridine	0.00836	0.00400	0.00800	0	104	45	125	3.41	30	N
Dimethylphenethylamine	0	0.00600	0.00800	0	0	45	125	0	30	S
Diphenylamine	0.0138	0.000800	0.0160	0	86.5	45	125	2.34	30	
Ethyl methanesulfonate	0.00588	0.000800	0.00800	0	73.5	45	125	10.0	30	
Methyl methanesulfonate	0.00496	0.000800	0.00800	0	62.0	45	125	12.9	30	
N-Nitrosopiperidine	0.00736	0.000800	0.00800	0	92.0	45	125	9.09	30	
p-Dimethylaminoazobenzene	0.00772	0.000800	0.00800	0	96.5	45	125	3.16	30	N
Pentachloronitrobenzene	0.00824	0.000800	0.00800	0	103	45	125	1.47	30	
Phenacetin	0.00812	0.000800	0.00800	0	102	45	125	7.14	30	
Pronamide	0.00740	0.000800	0.00800	0	92.5	45	125	2.19	30	
Surr: 2,4,6-Tribromophenol	14.6		16.00		91.5	42	124	0	0	
Surr: 2-Fluorobiphenyl	11.2		16.00		70.0	50	110	0	0	
Surr: 2-Fluorophenol	7.88		16.00		49.2	20	110	0	0	
Surr: 4-Terphenyl-d14	14.9		16.00		93.3	51	135	0	0	
Surr: Nitrobenzene-d5	12.2		16.00		76.5	41	110	0	0	
Surr: Phenol-d6	5.72		16.00		35.8	20	115	0	0	

Sample ID:	**MB-40157**	**Batch ID:**	**40157**	**TestNo:**	**SW8270C**	**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**GCMS4_100401A**	**Analysis Date:**	**04/01/10 06:36 PM**	**Prep Date:**	**03/24/10**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
1-Chloronaphthalene	<0.000200	0.000800								N
1-Naphthylamine	<0.000200	0.000800								
2-Naphthylamine	<0.000200	0.000800								
2-Picoline	<0.000200	0.000800								
3-Methylcholanthrene	<0.000200	0.000800								
4-Aminobiphenyl	<0.000200	0.000800								
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000800								
Dibenz(a,j)acridine	<0.00100	0.00400								N
Dimethylphenethylamine	<0.00200	0.00600								
Diphenylamine	<0.000200	0.000800								

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100401A

Ethyl methanesulfonate	<0.000200	0.000800					
Methyl methanesulfonate	<0.000200	0.000800					
N-Nitrosopiperidine	<0.000200	0.000800					
p-Dimethylaminoazobenzene	<0.000200	0.000800					N
Pentachloronitrobenzene	<0.000200	0.000800					
Phenacetin	<0.000200	0.000800					
Pronamide	<0.000200	0.000800					
Surr: 2,4,6-Tribromophenol	12.3		16.00	76.8	42	124	
Surr: 2-Fluorobiphenyl	10.5		16.00	65.8	50	110	
Surr: 2-Fluorophenol	6.32		16.00	39.5	20	110	
Surr: 4-Terphenyl-d14	12.7		16.00	79.5	51	135	
Surr: Nitrobenzene-d5	10.8		16.00	67.5	41	110	
Surr: Phenol-d6	4.24		16.00	26.5	20	115	

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_100401A

Sample ID:	**ICV-100401**	**Batch ID:**	**R48667**		**TestNo:**		**SW8270C**		**Units:**		**mg/L**
SampType:	**ICV**	**Run ID:**	**GCMS4_100401A**		**Analysis Date:**		**04/01/10 02:20 PM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
1-Chloronaphthalene		3.66	0.000800	4.00	0	91.5	80	120			N
1-Naphthylamine		4.22	0.000800	4.00	0	106	80	120			
2-Naphthylamine		4.59	0.000800	4.00	0	115	80	120			
2-Picoline		4.05	0.000800	4.00	0	101	80	120			
3-Methylcholanthrene		4.10	0.000800	4.00	0	103	80	120			
4-Aminobiphenyl		3.88	0.000800	4.00	0	97.0	80	120			
7,12-Dimethylbenz(a)anthracene		4.56	0.000800	4.00	0	114	80	120			
Dibenz(a,j)acridine		3.66	0.00400	4.00	0	91.5	80	120			N
Dimethylphenethylamine		4.28	0.00600	4.00	0	107	80	120			
Diphenylamine		3.77	0.000800	4.00	0	94.2	80	120			
Ethyl methanesulfonate		3.55	0.000800	4.00	0	88.8	80	120			
Methyl methanesulfonate		3.94	0.000800	4.00	0	98.5	80	120			
N-Nitrosopiperidine		4.32	0.000800	4.00	0	108	80	120			
p-Dimethylaminoazobenzene		3.75	0.000800	4.00	0	93.8	80	120			N
Pentachloronitrobenzene		4.18	0.000800	4.00	0	104	80	120			
Phenacetin		3.95	0.000800	4.00	0	98.8	80	120			
Pronamide		3.62	0.000800	4.00	0	90.5	80	120			
Surr: 2,4,6-Tribromophenol		3980		4000		99.5	80	120			
Surr: 2-Fluorobiphenyl		3700		4000		92.5	80	120			
Surr: 2-Fluorophenol		4210		4000		105	80	120			
Surr: 4-Terphenyl-d14		3570		4000		89.2	80	120			
Surr: Nitrobenzene-d5		4040		4000		101	80	120			
Surr: Phenol-d6		4140		4000		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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_100325A

Sample ID:	**LCS-40178**	**Batch ID:**	**40178**	**TestNo:**	**SW8260B**	**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**GCMS5_100325A**	**Analysis Date:**	**03/25/10 09:51 AM**	**Prep Date:**	**03/25/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
1,1,1,2-Tetrachloroethane	0.0242	0.00100	0.0232	0	104	80	130			
1,1,1-Trichloroethane	0.0268	0.00100	0.0232	0	116	65	130			
1,1,2,2-Tetrachloroethane	0.0230	0.00100	0.0232	0	99.1	65	130			
1,1,2-Trichloroethane	0.0255	0.00100	0.0232	0	110	75	125			
1,1-Dichloroethane	0.0243	0.00100	0.0232	0	105	70	135			
1,1-Dichloroethene	0.0265	0.00100	0.0232	0	114	70	130			
1,1-Dichloropropene	0.0263	0.00100	0.0232	0	113	75	130			
1,2,3-Trichlorobenzene	0.0222	0.00500	0.0232	0	95.7	55	140			
1,2,3-Trichloropropane	0.0237	0.00100	0.0232	0	102	75	125			
1,2,4-Trichlorobenzene	0.0225	0.00500	0.0232	0	97.2	65	135			
1,2,4-Trimethylbenzene	0.0229	0.00500	0.0232	0	98.8	75	130			
1,2-Dibromo-3-chloropropane	0.0225	0.0100	0.0232	0	97.1	50	130			
1,2-Dibromoethane	0.0237	0.00100	0.0232	0	102	80	120			
1,2-Dichlorobenzene	0.0237	0.00100	0.0232	0	102	70	120			
1,2-Dichloroethane	0.0259	0.00100	0.0232	0	112	70	130			
1,2-Dichloropropane	0.0238	0.00100	0.0232	0	103	75	125			
1,3,5-Trimethylbenzene	0.0233	0.00500	0.0232	0	101	75	130			
1,3-Dichlorobenzene	0.0231	0.00100	0.0232	0	99.5	75	125			
1,3-Dichloropropane	0.0230	0.00100	0.0232	0	99.1	75	125			
1,4-Dichloro-2-butene	0.0225	0.00200	0.0232	0	96.8	50	150			
1,4-Dichlorobenzene	0.0228	0.00100	0.0232	0	98.3	75	125			
2,2-Dichloropropane	0.0287	0.00100	0.0232	0	124	70	135			
2-Butanone	0.0292	0.0150	0.0232	0	126	30	150			
2-Chloroethylvinylether	0.0269	0.0150	0.0232	0	116	50	150			
2-Chlorotoluene	0.0235	0.00100	0.0232	0	101	75	125			
2-Hexanone	0.0259	0.0150	0.0232	0	112	55	130			
4-Chlorotoluene	0.0233	0.00100	0.0232	0	101	75	130			
4-Methyl-2-pentanone	0.0258	0.0150	0.0232	0	111	60	135			
Acetone	0.0316	0.0150	0.0232	0	136	40	140			
Acrylonitrile	0.0434	0.00300	0.0464	0	93.4	50	150			
Benzene	0.0242	0.00100	0.0232	0	104	80	120			
Bromobenzene	0.0228	0.00100	0.0232	0	98.4	75	125			
Bromochloromethane	0.0260	0.00100	0.0232	0	112	65	130			
Bromodichloromethane	0.0261	0.00100	0.0232	0	112	75	120			
Bromoform	0.0219	0.00100	0.0232	0	94.4	70	130			
Bromomethane	0.0316	0.00100	0.0232	0	136	30	145			
Carbon disulfide	0.0259	0.0150	0.0232	0	112	35	160			
Carbon tetrachloride	0.0296	0.00100	0.0232	0	127	65	140			
Chlorobenzene	0.0230	0.00100	0.0232	0	99.1	80	120			
Chloroethane	0.0272	0.00100	0.0232	0	117	60	135			
Chloroform	0.0258	0.00100	0.0232	0	111	65	135			
Chloromethane	0.0243	0.00100	0.0232	0	105	40	125			
cis-1,2-Dichloroethene	0.0253	0.00100	0.0232	0	109	70	125			
cis-1,3-Dichloropropene	0.0261	0.00100	0.0232	0	112	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_100325A

Dibromochloromethane	0.0239	0.00100	0.0232	0	103	60	135
Dibromomethane	0.0252	0.00100	0.0232	0	109	75	125
Dichlorodifluoromethane	0.0249	0.00100	0.0232	0	107	30	155
Ethylbenzene	0.0231	0.00100	0.0232	0	99.6	75	125
Hexachlorobutadiene	0.0229	0.00300	0.0232	0	98.5	50	140
Iodomethane	0.0267	0.0150	0.0232	0	115	50	150
Isopropylbenzene	0.0249	0.00100	0.0232	0	107	75	125
m,p-Xylene	0.0472	0.00200	0.0464	0	102	75	130
Methyl tert-butyl ether	0.0259	0.00100	0.0232	0	112	65	125
Methylene chloride	0.0243	0.00250	0.0232	0	105	55	140
n-Butylbenzene	0.0216	0.00100	0.0232	0	93.3	70	135
n-Propylbenzene	0.0230	0.00100	0.0232	0	99.3	70	130
Naphthalene	0.0205	0.0150	0.0232	0	88.5	55	138
o-Xylene	0.0243	0.00100	0.0232	0	105	80	120
p-Isopropyltoluene	0.0229	0.00100	0.0232	0	98.6	75	130
sec-Butylbenzene	0.0238	0.00100	0.0232	0	103	70	125
Styrene	0.0218	0.00100	0.0232	0	94.2	65	135
tert-Butylbenzene	0.0242	0.00100	0.0232	0	104	70	130
Tetrachloroethene	0.0238	0.00200	0.0232	0	103	45	150
Toluene	0.0245	0.00200	0.0232	0	106	75	120
trans-1,2-Dichloroethene	0.0242	0.00100	0.0232	0	104	60	140
trans-1,3-Dichloropropene	0.0241	0.00100	0.0232	0	104	55	140
Trichloroethene	0.0250	0.00200	0.0232	0	108	70	125
Trichlorofluoromethane	0.0276	0.00100	0.0232	0	119	60	145
Vinyl chloride	0.0258	0.00100	0.0232	0	111	50	145
Surr: 1,2-Dichloroethane-d4	210		200.0		105	70	120
Surr: 4-Bromofluorobenzene	194		200.0		96.9	75	120
Surr: Dibromofluoromethane	208		200.0		104	85	115
Surr: Toluene-d8	189		200.0		94.4	85	120

Sample ID:	**MB-40178**	**Batch ID:**	**40178**	**TestNo:**	**SW8260B**	**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**GCMS5_100325A**	**Analysis Date:**	**03/25/10 11:08 AM**	**Prep Date:**	**03/25/10**

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_100325A

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_100325A

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	212		200.0	106	70	120
Surr: 4-Bromofluorobenzene	211		200.0	106	75	120
Surr: Dibromofluoromethane	206		200.0	103	85	115
Surr: Toluene-d8	193		200.0	96.5	85	120

Sample ID:	**1003170-01AMS**	**Batch ID:**	**40178**	**TestNo:**	**SW8260B**	**Units:**	**mg/L**		
SampType:	**MS**	**Run ID:**	**GCMS5_100325A**	**Analysis Date:**	**03/25/10 08:44 PM**	**Prep Date:**	**03/25/10**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
1,1,1,2-Tetrachloroethane		0.0233	0.00100	0.0232	0	100	80	130			
1,1,1-Trichloroethane		0.0257	0.00100	0.0232	0	111	65	130			
1,1,2,2-Tetrachloroethane		0.0217	0.00100	0.0232	0	93.4	65	130			
1,1,2-Trichloroethane		0.0243	0.00100	0.0232	0	105	75	125			
1,1-Dichloroethane		0.0234	0.00100	0.0232	0	101	70	135			
1,1-Dichloroethene		0.0245	0.00100	0.0232	0	106	70	130			
1,1-Dichloropropene		0.0240	0.00100	0.0232	0	103	75	130			
1,2,3-Trichlorobenzene		0.0196	0.00500	0.0232	0	84.5	55	140			
1,2,3-Trichloropropane		0.0227	0.00100	0.0232	0	97.7	75	125			
1,2,4-Trichlorobenzene		0.0190	0.00500	0.0232	0	81.9	65	135			
1,2,4-Trimethylbenzene		0.0218	0.00500	0.0232	0	93.9	75	130			
1,2-Dibromo-3-chloropropane		0.0206	0.0100	0.0232	0	88.9	50	130			
1,2-Dibromoethane		0.0220	0.00100	0.0232	0	95.0	80	120			
1,2-Dichlorobenzene		0.0216	0.00100	0.0232	0	93.1	70	120			
1,2-Dichloroethane		0.0255	0.00100	0.0232	0	110	70	130			
1,2-Dichloropropane		0.0229	0.00100	0.0232	0	98.9	75	125			
1,3,5-Trimethylbenzene		0.0218	0.00500	0.0232	0	94.2	75	130			
1,3-Dichlorobenzene		0.0218	0.00100	0.0232	0	93.9	75	125			
1,3-Dichloropropane		0.0216	0.00100	0.0232	0	93.2	75	125			
1,4-Dichloro-2-butene		0.0186	0.00200	0.0232	0	80.2	50	150			
1,4-Dichlorobenzene		0.0214	0.00100	0.0232	0	92.4	75	125			
2,2-Dichloropropane		0.0241	0.00100	0.0232	0	104	70	135			
2-Butanone		0.0241	0.0150	0.0232	0	104	30	150			
2-Chloroethylvinylether		0	0.0150	0.0232	0	0	50	150			S
2-Chlorotoluene		0.0218	0.00100	0.0232	0	93.9	75	125			
2-Hexanone		0.0243	0.0150	0.0232	0	105	55	130			
4-Chlorotoluene		0.0219	0.00100	0.0232	0	94.5	75	130			
4-Methyl-2-pentanone		0.0248	0.0150	0.0232	0	107	60	135			
Acetone		0.0255	0.0150	0.0232	0	110	40	140			
Acrylonitrile		0.0406	0.00300	0.0464	0	87.6	50	150			
Benzene		0.0233	0.00100	0.0232	0	101	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_100325A

Bromobenzene	0.0211	0.00100	0.0232	0	90.9	75	125
Bromochloromethane	0.0245	0.00100	0.0232	0	106	65	130
Bromodichloromethane	0.0248	0.00100	0.0232	0	107	75	120
Bromoform	0.0187	0.00100	0.0232	0	80.6	70	130
Bromomethane	0.0244	0.00100	0.0232	0	105	30	145
Carbon disulfide	0.0215	0.0150	0.0232	0	92.8	35	160
Carbon tetrachloride	0.0249	0.00100	0.0232	0	107	65	140
Chlorobenzene	0.0221	0.00100	0.0232	0	95.1	80	120
Chloroethane	0.0258	0.00100	0.0232	0	111	60	135
Chloroform	0.0246	0.00100	0.0232	0	106	65	135
Chloromethane	0.0217	0.00100	0.0232	0	93.6	40	125
cis-1,2-Dichloroethene	0.0235	0.00100	0.0232	0	101	70	125
cis-1,3-Dichloropropene	0.0227	0.00100	0.0232	0	97.8	70	130
Dibromochloromethane	0.0216	0.00100	0.0232	0	92.9	60	135
Dibromomethane	0.0246	0.00100	0.0232	0	106	75	125
Dichlorodifluoromethane	0.0231	0.00100	0.0232	0	99.7	30	155
Ethylbenzene	0.0223	0.00100	0.0232	0	95.9	75	125
Hexachlorobutadiene	0.0210	0.00300	0.0232	0	90.3	50	140
Iodomethane	0.0213	0.0150	0.0232	0	91.7	50	150
Isopropylbenzene	0.0241	0.00100	0.0232	0	104	75	125
m,p-Xylene	0.0452	0.00200	0.0464	0	97.3	75	130
Methyl tert-butyl ether	0.0238	0.00100	0.0232	0	102	65	125
Methylene chloride	0.0232	0.00250	0.0232	0	100	55	140
n-Butylbenzene	0.0199	0.00100	0.0232	0	85.8	70	135
n-Propylbenzene	0.0214	0.00100	0.0232	0	92.2	70	130
Naphthalene	0.0176	0.0150	0.0232	0	76.0	55	138
o-Xylene	0.0231	0.00100	0.0232	0	99.7	80	120
p-Isopropyltoluene	0.0210	0.00100	0.0232	0	90.6	75	130
sec-Butylbenzene	0.0222	0.00100	0.0232	0	95.8	70	125
Styrene	0.0189	0.00100	0.0232	0	81.4	65	135
tert-Butylbenzene	0.0226	0.00100	0.0232	0	97.4	70	130
Tetrachloroethene	0.0224	0.00200	0.0232	0	96.4	45	150
Toluene	0.0237	0.00200	0.0232	0	102	75	120
trans-1,2-Dichloroethene	0.0228	0.00100	0.0232	0	98.4	60	140
trans-1,3-Dichloropropene	0.0225	0.00100	0.0232	0	97.2	55	140
Trichloroethene	0.0234	0.00200	0.0232	0	101	70	125
Trichlorofluoromethane	0.0268	0.00100	0.0232	0	115	60	145
Vinyl chloride	0.0232	0.00100	0.0232	0	100	50	145
Surr: 1,2-Dichloroethane-d4	216		200.0		108	70	120
Surr: 4-Bromofluorobenzene	194		200.0		97.0	75	120
Surr: Dibromofluoromethane	209		200.0		104	85	115
Surr: Toluene-d8	188		200.0		93.8	85	120

Sample ID:	**1003170-01AMSD**	**Batch ID:**	**40178**	**TestNo:**	**SW8260B**	**Units:**	**mg/L**
SampType:	**MSD**	**Run ID:**	**GCMS5_100325A**	**Analysis Date:**	**03/25/10 09:09 PM**	**Prep Date:**	**03/25/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
1,1,1,2-Tetrachloroethane	0.0238	0.00100	0.0232	0	102	80	130	2.13	20	

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_100325A

1,1,1-Trichloroethane	0.0250	0.00100	0.0232	0	108	65	130	2.68	20	
1,1,2,2-Tetrachloroethane	0.0222	0.00100	0.0232	0	95.8	65	130	2.60	20	
1,1,2-Trichloroethane	0.0243	0.00100	0.0232	0	105	75	125	0.288	20	
1,1-Dichloroethane	0.0231	0.00100	0.0232	0	99.7	70	135	1.25	20	
1,1-Dichloroethene	0.0249	0.00100	0.0232	0	107	70	130	1.46	20	
1,1-Dichloropropene	0.0243	0.00100	0.0232	0	105	75	130	1.16	20	
1,2,3-Trichlorobenzene	0.0207	0.00500	0.0232	0	89.1	55	140	5.27	20	
1,2,3-Trichloropropane	0.0231	0.00100	0.0232	0	99.7	75	125	1.97	20	
1,2,4-Trichlorobenzene	0.0199	0.00500	0.0232	0	85.8	65	135	4.63	20	
1,2,4-Trimethylbenzene	0.0225	0.00500	0.0232	0	97.1	75	130	3.29	20	
1,2-Dibromo-3-chloropropane	0.0217	0.0100	0.0232	0	93.7	50	130	5.24	20	
1,2-Dibromoethane	0.0229	0.00100	0.0232	0	98.8	80	120	3.87	20	
1,2-Dichlorobenzene	0.0222	0.00100	0.0232	0	95.7	70	120	2.78	20	
1,2-Dichloroethane	0.0251	0.00100	0.0232	0	108	70	130	1.34	20	
1,2-Dichloropropane	0.0230	0.00100	0.0232	0	99.3	75	125	0.435	20	
1,3,5-Trimethylbenzene	0.0223	0.00500	0.0232	0	96.2	75	130	2.13	20	
1,3-Dichlorobenzene	0.0224	0.00100	0.0232	0	96.7	75	125	2.94	20	
1,3-Dichloropropane	0.0221	0.00100	0.0232	0	95.3	75	125	2.24	20	
1,4-Dichloro-2-butene	0.0189	0.00200	0.0232	0	81.5	50	150	1.60	20	
1,4-Dichlorobenzene	0.0217	0.00100	0.0232	0	93.4	75	125	1.16	20	
2,2-Dichloropropane	0.0239	0.00100	0.0232	0	103	70	135	0.917	20	
2-Butanone	0.0252	0.0150	0.0232	0	109	30	150	4.38	20	
2-Chloroethylvinylether	0	0.0150	0.0232	0	0	50	150	0	20	S
2-Chlorotoluene	0.0222	0.00100	0.0232	0	95.9	75	125	2.09	20	
2-Hexanone	0.0251	0.0150	0.0232	0	108	55	130	3.32	20	
4-Chlorotoluene	0.0225	0.00100	0.0232	0	96.8	75	130	2.43	20	
4-Methyl-2-pentanone	0.0246	0.0150	0.0232	0	106	60	135	0.768	20	
Acetone	0.0266	0.0150	0.0232	0	115	40	140	4.34	20	
Acrylonitrile	0.0425	0.00300	0.0464	0	91.5	50	150	4.40	20	
Benzene	0.0235	0.00100	0.0232	0	101	80	120	0.853	20	
Bromobenzene	0.0216	0.00100	0.0232	0	93.1	75	125	2.39	20	
Bromochloromethane	0.0245	0.00100	0.0232	0	106	65	130	0.122	20	
Bromodichloromethane	0.0246	0.00100	0.0232	0	106	75	120	0.890	20	
Bromoform	0.0192	0.00100	0.0232	0	82.5	70	130	2.43	20	
Bromomethane	0.0260	0.00100	0.0232	0	112	30	145	6.03	20	
Carbon disulfide	0.0219	0.0150	0.0232	0	94.6	35	160	1.84	20	
Carbon tetrachloride	0.0253	0.00100	0.0232	0	109	65	140	1.47	20	
Chlorobenzene	0.0223	0.00100	0.0232	0	96.3	80	120	1.22	20	
Chloroethane	0.0254	0.00100	0.0232	0	109	60	135	1.68	20	
Chloroform	0.0245	0.00100	0.0232	0	105	65	135	0.408	20	
Chloromethane	0.0229	0.00100	0.0232	0	98.6	40	125	5.16	20	
cis-1,2-Dichloroethene	0.0231	0.00100	0.0232	0	99.6	70	125	1.80	20	
cis-1,3-Dichloropropene	0.0229	0.00100	0.0232	0	98.7	70	130	0.921	20	
Dibromochloromethane	0.0220	0.00100	0.0232	0	94.8	60	135	2.02	20	
Dibromomethane	0.0248	0.00100	0.0232	0	107	75	125	0.889	20	
Dichlorodifluoromethane	0.0233	0.00100	0.0232	0	101	30	155	0.818	20	
Ethylbenzene	0.0231	0.00100	0.0232	0	99.6	75	125	3.70	20	

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_100325A

Hexachlorobutadiene	0.0215	0.00300	0.0232	0	92.8	50	140	2.68	20
Iodomethane	0.0238	0.0150	0.0232	0	102	50	150	11.0	20
Isopropylbenzene	0.0243	0.00100	0.0232	0	105	75	125	0.869	20
m,p-Xylene	0.0471	0.00200	0.0464	0	102	75	130	4.27	20
Methyl tert-butyl ether	0.0245	0.00100	0.0232	0	106	65	125	3.15	20
Methylene chloride	0.0231	0.00250	0.0232	0	99.6	55	140	0.561	20
n-Butylbenzene	0.0204	0.00100	0.0232	0	88.0	70	135	2.58	20
n-Propylbenzene	0.0221	0.00100	0.0232	0	95.1	70	130	3.04	20
Naphthalene	0.0199	0.0150	0.0232	0	85.7	55	138	11.9	20
o-Xylene	0.0245	0.00100	0.0232	0	106	80	120	5.75	20
p-Isopropyltoluene	0.0214	0.00100	0.0232	0	92.4	75	130	1.98	20
sec-Butylbenzene	0.0224	0.00100	0.0232	0	96.6	70	125	0.762	20
Styrene	0.0197	0.00100	0.0232	0	84.8	65	135	4.15	20
tert-Butylbenzene	0.0232	0.00100	0.0232	0	100	70	130	2.71	20
Tetrachloroethene	0.0224	0.00200	0.0232	0	96.4	45	150	0.044	20
Toluene	0.0248	0.00200	0.0232	0	107	75	120	4.71	20
trans-1,2-Dichloroethene	0.0227	0.00100	0.0232	0	98.0	60	140	0.395	20
trans-1,3-Dichloropropene	0.0224	0.00100	0.0232	0	96.6	55	140	0.623	20
Trichloroethene	0.0234	0.00200	0.0232	0	101	70	125	0.257	20
Trichlorofluoromethane	0.0262	0.00100	0.0232	0	113	60	145	2.19	20
Vinyl chloride	0.0243	0.00100	0.0232	0	105	50	145	4.58	20
Surr: 1,2-Dichloroethane-d4	212		200.0		106	70	120	0	0
Surr: 4-Bromofluorobenzene	195		200.0		97.6	75	120	0	0
Surr: Dibromofluoromethane	206		200.0		103	85	115	0	0
Surr: Toluene-d8	190		200.0		95.1	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_100325A

Sample ID:	**ICV2-100325**	**Batch ID:**	**R48521**		**TestNo:**		**SW8260B**		**Units:**		**mg/L**
SampType:	**ICV**	**Run ID:**	**GCMS5_100325A**		**Analysis Date:**		**03/25/10 09:25 AM**		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
1,1,1,2-Tetrachloroethane		0.0481	0.00100	0.0464	0	104	80	120			
1,1,1-Trichloroethane		0.0514	0.00100	0.0464	0	111	80	120			
1,1,2,2-Tetrachloroethane		0.0417	0.00100	0.0464	0	89.8	80	120			
1,1,2-Trichloroethane		0.0480	0.00100	0.0464	0	103	80	120			
1,1-Dichloroethane		0.0478	0.00100	0.0464	0	103	80	120			
1,1-Dichloroethene		0.0486	0.00100	0.0464	0	105	80	120			
1,1-Dichloropropene		0.0498	0.00100	0.0464	0	107	80	120			
1,2,3-Trichlorobenzene		0.0399	0.00500	0.0464	0	86.0	80	120			
1,2,3-Trichloropropane		0.0430	0.00100	0.0464	0	92.6	80	120			
1,2,4-Trichlorobenzene		0.0414	0.00500	0.0464	0	89.2	80	120			
1,2,4-Trimethylbenzene		0.0445	0.00500	0.0464	0	95.9	80	120			
1,2-Dibromo-3-chloropropane		0.0404	0.0100	0.0464	0	87.0	80	120			
1,2-Dibromoethane		0.0447	0.00100	0.0464	0	96.3	80	120			
1,2-Dichlorobenzene		0.0446	0.00100	0.0464	0	96.1	80	120			
1,2-Dichloroethane		0.0493	0.00100	0.0464	0	106	80	120			
1,2-Dichloropropane		0.0466	0.00100	0.0464	0	100	80	120			
1,3,5-Trimethylbenzene		0.0443	0.00500	0.0464	0	95.4	80	120			
1,3-Dichlorobenzene		0.0449	0.00100	0.0464	0	96.9	80	120			
1,3-Dichloropropane		0.0435	0.00100	0.0464	0	93.8	80	120			
1,4-Dichloro-2-butene		0.0435	0.00200	0.0464	0	93.8	80	120			
1,4-Dichlorobenzene		0.0428	0.00100	0.0464	0	92.3	80	120			
2,2-Dichloropropane		0.0562	0.00100	0.0464	0	121	80	120			S
2-Butanone		0.0472	0.0150	0.0464	0	102	80	120			
2-Chloroethylvinylether		0.0478	0.0150	0.0464	0	103	80	120			
2-Chlorotoluene		0.0442	0.00100	0.0464	0	95.3	80	120			
2-Hexanone		0.0397	0.0150	0.0464	0	85.6	80	120			
4-Chlorotoluene		0.0452	0.00100	0.0464	0	97.3	80	120			
4-Methyl-2-pentanone		0.0432	0.0150	0.0464	0	93.0	80	120			
Acetone		0.0455	0.0150	0.0464	0	98.1	80	120			
Acrylonitrile		0.0786	0.00300	0.0928	0	84.7	60	140			
Benzene		0.0471	0.00100	0.0464	0	102	80	120			
Bromobenzene		0.0438	0.00100	0.0464	0	94.4	80	120			
Bromochloromethane		0.0488	0.00100	0.0464	0	105	80	120			
Bromodichloromethane		0.0516	0.00100	0.0464	0	111	80	120			
Bromoform		0.0426	0.00100	0.0464	0	91.8	80	120			
Bromomethane		0.0503	0.00100	0.0464	0	108	80	120			
Carbon disulfide		0.0524	0.0150	0.0464	0	113	80	120			
Carbon tetrachloride		0.0519	0.00100	0.0464	0	112	80	120			
Chlorobenzene		0.0436	0.00100	0.0464	0	94.0	80	120			
Chloroethane		0.0512	0.00100	0.0464	0	110	80	120			
Chloroform		0.0493	0.00100	0.0464	0	106	80	120			
Chloromethane		0.0430	0.00100	0.0464	0	92.6	80	120			
cis-1,2-Dichloroethene		0.0481	0.00100	0.0464	0	104	80	120			
cis-1,3-Dichloropropene		0.0519	0.00100	0.0464	0	112	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_100325A

Dibromochloromethane	0.0468	0.00100	0.0464	0	101	80	120
Dibromomethane	0.0480	0.00100	0.0464	0	103	80	120
Dichlorodifluoromethane	0.0461	0.00100	0.0464	0	99.3	80	120
Ethylbenzene	0.0445	0.00100	0.0464	0	95.8	80	120
Hexachlorobutadiene	0.0439	0.00300	0.0464	0	94.6	80	120
Iodomethane	0.0428	0.0150	0.0464	0	92.3	80	120
Isopropylbenzene	0.0492	0.00100	0.0464	0	106	80	120
m,p-Xylene	0.0925	0.00200	0.0928	0	99.7	80	120
Methyl tert-butyl ether	0.0495	0.00100	0.0464	0	107	80	120
Methylene chloride	0.0463	0.00250	0.0464	0	99.8	80	120
n-Butylbenzene	0.0420	0.00100	0.0464	0	90.5	80	120
n-Propylbenzene	0.0437	0.00100	0.0464	0	94.2	80	120
Naphthalene	0.0376	0.0150	0.0464	0	80.9	80	120
o-Xylene	0.0485	0.00100	0.0464	0	104	80	120
p-Isopropyltoluene	0.0434	0.00100	0.0464	0	93.6	80	120
sec-Butylbenzene	0.0450	0.00100	0.0464	0	97.0	80	120
Styrene	0.0435	0.00100	0.0464	0	93.7	80	120
tert-Butylbenzene	0.0468	0.00100	0.0464	0	101	80	120
Tetrachloroethene	0.0454	0.00200	0.0464	0	97.9	80	120
Toluene	0.0476	0.00200	0.0464	0	103	80	120
trans-1,2-Dichloroethene	0.0471	0.00100	0.0464	0	101	80	120
trans-1,3-Dichloropropene	0.0492	0.00100	0.0464	0	106	80	120
Trichloroethene	0.0479	0.00200	0.0464	0	103	80	120
Trichlorofluoromethane	0.0528	0.00100	0.0464	0	114	80	120
Vinyl chloride	0.0462	0.00100	0.0464	0	99.5	80	120
Surr: 1,2-Dichloroethane-d4	212		200.0		106	70	120
Surr: 4-Bromofluorobenzene	194		200.0		97.0	75	120
Surr: Dibromofluoromethane	206		200.0		103	85	115
Surr: Toluene-d8	189		200.0		94.5	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: IC_100323A

Sample ID:	**LCS-40144**	**Batch ID:**	**40144**		**TestNo:**		**E300**		**Units:**		**mg/L**
SampType:	**LCS**	**Run ID:**	**IC_100323A**		**Analysis Date:**		**03/23/10 09:17 AM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chloride		10.2	1.00	10.00	0	102	90	110			
Sulfate		30.2	3.00	30.00	0	101	90	110			

Sample ID:	**LCSD-40144**	**Batch ID:**	**40144**		**TestNo:**		**E300**		**Units:**		**mg/L**
SampType:	**LCSD**	**Run ID:**	**IC_100323A**		**Analysis Date:**		**03/23/10 09:29 AM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chloride		10.2	1.00	10.00	0	102	90	110	0.442	20	
Sulfate		30.2	3.00	30.00	0	101	90	110	0.025	20	

Sample ID:	**MB-40144**	**Batch ID:**	**40144**		**TestNo:**		**E300**		**Units:**		**mg/L**
SampType:	**MBLK**	**Run ID:**	**IC_100323A**		**Analysis Date:**		**03/23/10 09:57 AM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chloride		<0.300	1.00								
Sulfate		<1.00	3.00								

Sample ID:	**1003170-01F DUP**	**Batch ID:**	**40144**		**TestNo:**		**E300**		**Units:**		**mg/L**
SampType:	**DUP**	**Run ID:**	**IC_100323A**		**Analysis Date:**		**03/23/10 03:40 PM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chloride		1190	100	0	1148				3.37	10	
Sulfate		6660	300	0	6465				2.98	10	

Sample ID:	**1003170-01F MS**	**Batch ID:**	**40144**		**TestNo:**		**E300**		**Units:**		**mg/L**
SampType:	**MS**	**Run ID:**	**IC_100323A**		**Analysis Date:**		**03/23/10 03:51 PM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chloride		1730	100	1000	689.0	104	90	110			
Sulfate		7120	300	3000	3879	108	90	110			

Sample ID:	**1003170-01F MSD**	**Batch ID:**	**40144**		**TestNo:**		**E300**		**Units:**		**mg/L**
SampType:	**MSD**	**Run ID:**	**IC_100323A**		**Analysis Date:**		**03/23/10 04:02 PM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chloride		1730	100	1000	689.0	104	90	110	0.287	20	
Sulfate		7100	300	3000	3879	107	90	110	0.246	20	

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: IC_100323A

Sample ID:	**ICV-100323**	**Batch ID:**	**R48482**		**TestNo:**		**E300**		**Units:**		**mg/L**
SampType:	**ICV**	**Run ID:**	**IC_100323A**		**Analysis Date:**		**03/23/10 09:03 AM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chloride		25.8	1.00	25.00	0	103	90	110			
Sulfate		78.2	3.00	75.00	0	104	90	110			

Sample ID:	**CCV1-100323**	**Batch ID:**	**R48482**		**TestNo:**		**E300**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**IC_100323A**		**Analysis Date:**		**03/23/10 03:15 PM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chloride		10.2	1.00	10.00	0	102	90	110			
Sulfate		30.5	3.00	30.00	0	102	90	110			

Sample ID:	**CCV2-100323**	**Batch ID:**	**R48482**		**TestNo:**		**E300**		**Units:**		**mg/L**
SampType:	**CCV**	**Run ID:**	**IC_100323A**		**Analysis Date:**		**03/23/10 04:36 PM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Chloride		10.3	1.00	10.00	0	103	90	110			
Sulfate		30.8	3.00	30.00	0	103	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_100323A

Sample ID:	**1003170-01F DUP**	**Batch ID:**	**40138**	**TestNo:**	**M4500-H+ B**	**Units:**	**pH Units**
SampType:	**DUP**	**Run ID:**	**TITRATOR_100323A**	**Analysis Date:**	**03/23/10 11:30 AM**	**Prep Date:**	**03/23/10**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
pH	7.61	0	0	7.620				0.131	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_100323A

Sample ID:	**ICV-100323**	**Batch ID:**	**R48478**		**TestNo:**		**M4500-H+ B**		**Units:**		**pH Units**
SampType:	**ICV**	**Run ID:**	**TITRATOR_100323A**		**Analysis Date:**		**03/23/10 11:28 AM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
pH		9.98	0	10.00	0	99.8	99	101			

Sample ID:	**CCV1-100323**	**Batch ID:**	**R48478**		**TestNo:**		**M4500-H+ B**		**Units:**		**pH Units**
SampType:	**CCV**	**Run ID:**	**TITRATOR_100323A**		**Analysis Date:**		**03/23/10 11:37 AM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
pH		6.99	0	7.000	0	99.9	97.1	102.9			

Sample ID:	**CCV2-100323**	**Batch ID:**	**R48478**		**TestNo:**		**M4500-H+ B**		**Units:**		**pH Units**
SampType:	**CCV**	**Run ID:**	**TITRATOR_100323A**		**Analysis Date:**		**03/23/10 11:40 AM**		**Prep Date:**		**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
pH		6.97	0	7.000	0	99.6	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_100323B

Sample ID:	**MB-40145**	**Batch ID:**	**40145**	**TestNo:**	**M2320 B**	**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**TITRATOR_100323B**	**Analysis Date:**	**03/23/10 01:29 PM**	**Prep Date:**	**03/23/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0								
Alkalinity, Total (As CaCO3)	<10.0	20.0								

Sample ID:	**LCS-40145**	**Batch ID:**	**40145**	**TestNo:**	**M2320 B**	**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**TITRATOR_100323B**	**Analysis Date:**	**03/23/10 01:33 PM**	**Prep Date:**	**03/23/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Alkalinity, Total (As CaCO3)	54.2	20.0	50.00	0	108	74	129			

Sample ID:	**1003170-01F DUP**	**Batch ID:**	**40145**	**TestNo:**	**M2320 B**	**Units:**	**mg/L**
SampType:	**DUP**	**Run ID:**	**TITRATOR_100323B**	**Analysis Date:**	**03/23/10 01:43 PM**	**Prep Date:**	**03/23/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Alkalinity, Bicarbonate (As CaCO3)	182	20.0	0	183.3				0.987	20	
Alkalinity, Carbonate (As CaCO3)	0	20.0	0	0				0	20	
Alkalinity, Hydroxide (As CaCO3)	0	20.0	0	0				0	20	
Alkalinity, Total (As CaCO3)	182	20.0	0	183.3				0.987	20	

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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_100323B

Sample ID:	**ICV-100323**	**Batch ID:**	**R48486**	**TestNo:**		**M2320 B**		**Units:**	**mg/L**
SampType:	**ICV**	**Run ID:**	**TITRATOR_100323B**	**Analysis Date:**		**03/23/10 01:27 PM**		**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Alkalinity, Bicarbonate (As CaCO3)		5.12	20.0	0							
Alkalinity, Carbonate (As CaCO3)		94.9	20.0	0							
Alkalinity, Hydroxide (As CaCO3)		0	20.0	0							
Alkalinity, Total (As CaCO3)		100	20.0	100.0	0	100	98	102			

Sample ID:	**CCV1-100323**	**Batch ID:**	**R48486**	**TestNo:**		**M2320 B**		**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**TITRATOR_100323B**	**Analysis Date:**		**03/23/10 02:18 PM**		**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Alkalinity, Bicarbonate (As CaCO3)		10.9	20.0	0							
Alkalinity, Carbonate (As CaCO3)		89.1	20.0	0							
Alkalinity, Hydroxide (As CaCO3)		0	20.0	0							
Alkalinity, Total (As CaCO3)		100	20.0	100.0	0	100	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TOC_100323A

Sample ID:	**LCS-40135**	**Batch ID:**	**40135**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**TOC_100323A**	**Analysis Date:**	**03/23/10 01:15 PM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		9.26	1.00	10.00	0	92.6	80	120			

Sample ID:	**MB-40135**	**Batch ID:**	**40135**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**TOC_100323A**	**Analysis Date:**	**03/23/10 01:49 PM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		<0.300	1.00								

Sample ID:	**1003070-03C MS**	**Batch ID:**	**40135**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**MS**	**Run ID:**	**TOC_100323A**	**Analysis Date:**	**03/23/10 03:56 PM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		9.97	1.00	10.00	0.7355	92.4	80	120			

Sample ID:	**1003170-03C MSD**	**Batch ID:**	**40135**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**MSD**	**Run ID:**	**TOC_100323A**	**Analysis Date:**	**03/23/10 04:15 PM**			**Prep Date:**	**03/23/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		10.2	1.00	10.00	0.7355	94.3	80	120	1.92	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TOC_100323A

Sample ID:	**ICV-100323**	**Batch ID:**	**R48490**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**ICV**	**Run ID:**	**TOC_100323A**	**Analysis Date:**	**03/23/10 12:57 PM**			**Prep Date:**	**03/23/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon	14.1	1.00	15.00	0	93.8	90	110			

Sample ID:	**CCV-100323**	**Batch ID:**	**R48490**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**TOC_100323A**	**Analysis Date:**	**03/23/10 04:32 PM**			**Prep Date:**	**03/23/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon	8.18	1.00	10.00	0	81.8	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TOC_100324B

Sample ID:	**LCS-40168**	**Batch ID:**	**40168**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**LCS**	**Run ID:**	**TOC_100324B**	**Analysis Date:**	**03/24/10 11:04 AM**			**Prep Date:**	**03/24/10**
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			

Sample ID:	**MB-40168**	**Batch ID:**	**40168**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**MBLK**	**Run ID:**	**TOC_100324B**	**Analysis Date:**	**03/24/10 11:36 AM**			**Prep Date:**	**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		<0.300	1.00								

Sample ID:	**1003170-08C MS**	**Batch ID:**	**40168**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**MS**	**Run ID:**	**TOC_100324B**	**Analysis Date:**	**03/24/10 03:44 PM**			**Prep Date:**	**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		11.2	1.00	10.00	2.234	89.5	80	120			

Sample ID:	**1003170-08C MSD**	**Batch ID:**	**40168**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**MSD**	**Run ID:**	**TOC_100324B**	**Analysis Date:**	**03/24/10 04:03 PM**			**Prep Date:**	**03/24/10**
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon		11.9	1.00	10.00	2.234	96.2	80	120	5.80	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: 1003170
Project: HELSTF Construction Landfill Groundwater

ANALYTICAL QC SUMMARY REPORT

RunID: TOC_100324B

Sample ID:	**ICV-100324**	**Batch ID:**	**R48514**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**ICV**	**Run ID:**	**TOC_100324B**	**Analysis Date:**	**03/24/10 10:46 AM**			**Prep Date:**	**03/24/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon	13.9	1.00	15.00	0	92.4	90	110			

Sample ID:	**CCV-100324**	**Batch ID:**	**R48514**	**TestNo:**	**M5310C**			**Units:**	**mg/L**
SampType:	**CCV**	**Run ID:**	**TOC_100324B**	**Analysis Date:**	**03/24/10 04:20 PM**			**Prep Date:**	**03/24/10**

Analyte	**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Total Organic Carbon	10.3	1.00	10.00	0	103	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: 1003170
Project: HELSTF Construction Landfill Groundwater

MQL SUMMARY REPORT

TestNo: E300 Analyte	MDL mg/L	MQL mg/L
Chloride	0.300	1.00
Sulfate	1.00	3.00

TestNo: SW8260B Analyte	MDL mg/L	MQL mg/L
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
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
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

TestNo: SW8270C Analyte	MDL mg/L	MQL mg/L
1,2,4,5-Tetrachlorobenzene	0.000200	0.000800
1,2,4-Trichlorobenzene	0.000200	0.000800
1,2-Dichlorobenzene	0.000200	0.000800
1,2-Diphenylhydrazine	0.000200	0.000800
1,3-Dichlorobenzene	0.000200	0.000800
1,4-Dichlorobenzene	0.000200	0.000800
1-Chloronaphthalene	0.000200	0.000800
1-Methylnaphthalene	0.000200	0.000800
1-Naphthylamine	0.000200	0.000800
2,4,5-Trichlorophenol	0.000200	0.000800
2,4,6-Trichlorophenol	0.000200	0.000800
2,4-Dichlorophenol	0.000200	0.000800
2,4-Dimethylphenol	0.000200	0.000800

Qualifiers:
MQL - Method Quantitation Limit as defined by TRRP
MDL - Method Detection Limit as defined by TRRP

CLIENT: Zia Engineering & Environmental
Work Order: 1003170
Project: HELSTF Construction Landfill Groundwater

MQL SUMMARY REPORT

2,4-Dinitrophenol	0.00100	0.00400
2,4-Dinitrotoluene	0.000200	0.000800
2,6-Dichlorophenol	0.000200	0.000800
2,6-Dinitrotoluene	0.000200	0.000800
2-Chloronaphthalene	0.000200	0.000800
2-Chlorophenol	0.000200	0.000800
2-Methylnaphthalene	0.000200	0.000800
2-Methylphenol	0.000200	0.000800
2-Naphthylamine	0.000200	0.000800
2-Nitroaniline	0.000200	0.000800
2-Nitrophenol	0.000200	0.000800
2-Picoline	0.000200	0.000800
3,3´-Dichlorobenzidine	0.00100	0.00400
3-Methylcholanthrene	0.000200	0.000800
3-Nitroaniline	0.000200	0.000800
4,6-Dinitro-2-methylphenol	0.000600	0.00200
4-Aminobiphenyl	0.000200	0.000800
4-Bromophenyl phenyl ether	0.000200	0.000800
4-Chloro-3-methylphenol	0.000200	0.000800
4-Chloroaniline	0.000600	0.00200
4-Chlorophenyl phenyl ether	0.000200	0.000800
4-Methylphenol	0.000200	0.000800
4-Nitroaniline	0.000200	0.000800
4-Nitrophenol	0.00100	0.00400
7,12-Dimethylbenz(a)anthracene	0.000200	0.000800
Acenaphthene	0.000200	0.000800
Acenaphthylene	0.000200	0.000800
Acetophenone	0.000200	0.000800
Aniline	0.000200	0.000800
Anthracene	0.000200	0.000800
Benzidine	0.00200	0.00600
Benzo[a]anthracene	0.000200	0.000800
Benzo[a]pyrene	0.000200	0.000800
Benzo[b]fluoranthene	0.000200	0.000800
Benzo[g,h,i]perylene	0.000200	0.000800
Benzo[k]fluoranthene	0.000200	0.000800
Benzoic acid	0.00200	0.00600
Benzyl alcohol	0.000600	0.00200
Biphenyl	0.000200	0.000800
Bis(2-chloroethoxy)methane	0.000200	0.000800
Bis(2-chloroethyl)ether	0.000200	0.000800
Bis(2-chloroisopropyl)ether	0.000200	0.000800
Bis(2-ethylhexyl)phthalate	0.00100	0.00300
Butyl benzyl phthalate	0.00200	0.00600
Carbazole	0.000200	0.000800
Chrysene	0.000200	0.000800
Di-n-butyl phthalate	0.00200	0.00600
Di-n-octyl phthalate	0.00200	0.00600
Dibenz(a,j)acridine	0.00100	0.00400
Dibenz[a,h]anthracene	0.000200	0.000800
Dibenzofuran	0.000200	0.000800
Diethyl phthalate	0.00200	0.00600
Dimethyl phthalate	0.00200	0.00600
Dimethylphenethylamine	0.00200	0.00600
Diphenylamine	0.000200	0.000800
Ethyl methanesulfonate	0.000200	0.000800
Fluoranthene	0.000200	0.000800
Fluorene	0.000200	0.000800
Hexachlorobenzene	0.000200	0.000800
Hexachlorobutadiene	0.000200	0.000800
Hexachlorocyclopentadiene	0.000600	0.00200
Hexachloroethane	0.000200	0.000800
Indeno[1,2,3-cd]pyrene	0.000200	0.000800
Isophorone	0.000200	0.000800
Methyl methanesulfonate	0.000200	0.000800
N-Nitrosodi-n-propylamine	0.000100	0.000800
N-Nitrosodimethylamine	0.000200	0.000800
N-Nitrosodiphenylamine	0.000200	0.000800
N-Nitrosopiperidine	0.000200	0.000800
Naphthalene	0.000200	0.000800
Nitrobenzene	0.000200	0.000800
p-Dimethylaminoazobenzene	0.000200	0.000800
Pentachlorobenzene	0.000200	0.000800
Pentachloronitrobenzene	0.000200	0.000800
Pentachlorophenol	0.000200	0.000800
Phenacetin	0.000200	0.000800
Phenanthrene	0.000200	0.000800
Phenol	0.000200	0.000800
Pronamide	0.000200	0.000800
Pyrene	0.000200	0.000800
Pyridine	0.000800	0.00200

TestNo: M2320 B	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Alkalinity, Bicarbonate (As CaCO3)	10.0	20.0
Alkalinity, Carbonate (As CaCO3)	10.0	20.0
Alkalinity, Hydroxide (As CaCO3)	10.0	20.0
Alkalinity, Total (As CaCO3)	10.0	20.0

TestNo: M8015D	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
TPH-DRO C10-C28	0.0500	0.100

Qualifiers:
MQL - Method Quantitation Limit as defined by TRRP
MDL - Method Detection Limit as defined by TRRP

CLIENT: Zia Engineering & Environmental
Work Order: 1003170
Project: HELSTF Construction Landfill Groundwater

MQL SUMMARY REPORT

TestNo: SW7470A	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Mercury	0.0000600	0.000200

TestNo: SW6020	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Arsenic	0.00200	0.00600
Barium	0.00300	0.0100
Cadmium	0.000300	0.00100
Calcium	0.100	0.300
Chromium	0.00200	0.00600
Lead	0.000300	0.00100
Magnesium	0.100	0.300
Potassium	0.100	0.300
Selenium	0.00200	0.00600
Silver	0.000600	0.00200
Sodium	0.100	0.300

TestNo: SW6020	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Arsenic	0.00200	0.00600
Barium	0.00300	0.0100
Cadmium	0.000300	0.00100
Calcium	0.100	0.300
Chromium	0.00200	0.00600
Lead	0.000300	0.00100
Magnesium	0.100	0.300
Potassium	0.100	0.300
Selenium	0.00200	0.00600
Silver	0.000600	0.00200
Sodium	0.100	0.300

TestNo: M8015V	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Gasoline Range Organics	0.0600	0.100

TestNo: M5310C	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Total Organic Carbon	0.300	1.00

Qualifiers:
MQL - Method Quantitation Limit as defined by TRRP
MDL - Method Detection Limit as defined by TRRP