



June 7, 2016

Scott Ghan
Senior EH&S Specialist
Vanguard Operating, LLC
112 Red Feather Trail
Silt, CO 81652

RE: MDP#6 Pit Closure (Facility ID – 430352) (Remediation Project Number - #9318)
SESW Sec. 32 T6S R91W
Vanguard Operating, LLC
Garfield County, Colorado

Dear Mr. Ghan:

LT Environmental, Inc. (LTE) was contracted by Vanguard Operating, LLC (Vanguard) to conduct soil confirmation sampling activities associated with pit (Facility ID – 430352) closure activities at the MDP#6 well pad (Location ID – 416979) (Site). A topographical Site Location Map is included as Figure 1. The following is being submitted as supplemental information to the Form 27 submitted October 9, 2015 (document #2315751, REM#9318). As stated in the Form 27, the pit was constructed and operated by a previous operator. All E&P fluids were removed from the pit by January 2013, and the pit has been out of service since. The fluids were disposed of in one of the previous operator's injection wells. During removal of the pit liners, Vanguard noted that the liners were in good condition and there were no visible signs of a release below the liner system. The liners were washed, bailed, and hauled to West Garfield County landfill for disposal. Disposal manifests can be provided upon request.

On April 26, 2016, LTE personnel collected soil samples from the bottom of the pit at the Site. Three pit bottom soil samples (PB01, PB02, and PB03) were collected and submitted for laboratory analysis of constituents identified in Colorado Oil and Gas Conservation Commission (COGCC) Table 910-1. Laboratory analytical results indicated soil sample PB01 exceeded the COGCC Table 910-1 allowable concentration levels for electric conductivity (EC), sodium adsorption ratio (SAR), and pH. However, these exceedances were observed approximately 20 to 22 feet below ground surface, and thus below the vegetative root zone. All other analytes were compliant with COGCC Table 910-1 allowable concentrations with the exception of arsenic values, which were within the allowable range of 1.25 times background arsenic concentrations observed in the area. The laboratory analytical results are included as an attachment and summarized in Table 1. The pit and soil sample locations are depicted on Figure 2.

Following the attached written approval from Mr. Carlos Lujan of the COGCC, Vanguard backfilled the pit to match the pre-existing grade. Additionally, the former pit location was recontoured and seeded. Because the pit is part of an active well pad and ongoing production



activities, the reclaimed area will be managed under Vanguard's surface management programs such as stormwater and weed management.

Based on the analytical results of soil confirmation samples collected from the pit bottom, Vanguard is requesting the COGCC provide No Further Action (NFA) and closure documentation for REM#9318.

Please call us at (970) 285-9985 if you have any questions regarding this report or require additional information.

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to read 'Chris McKisson'.

Chris McKisson
Project Environmental Scientist

A handwritten signature in black ink, appearing to read 'Robert D. Fishburn'.

Robert D. Fishburn, P.G.
Sr. Hydrogeologist

Attachments:

Figure 1 – Site Location Map

Figure 2 – Site Map

Table 1 – Soil Analytical Results

Laboratory Analytical Report

COGCC Email Correspondence

ATTACHMENTS



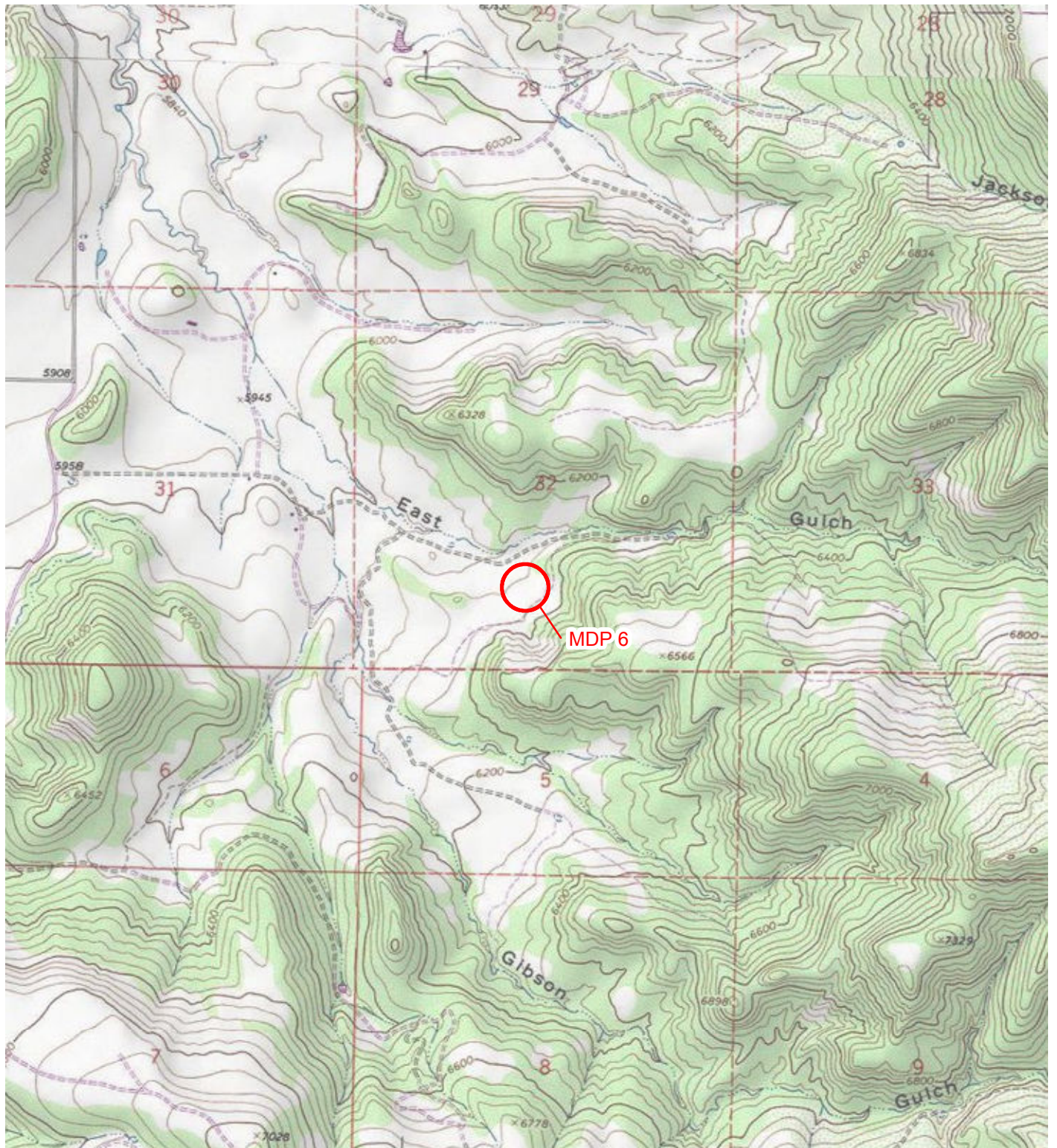
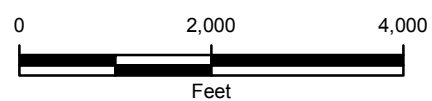


IMAGE COURTESY OF ESRI/USGS

LEGEND

○ SITE LOCATION



COLORADO



FIGURE 1
SITE LOCATION MAP
MDP 6
SESW SEC 32-T6S-R91W
GARFIELD COUNTY, COLORADO
VANGUARD OPERATING, LLC





IMAGE COURTESY OF ESRI

LEGEND

● PIT BOTTOM SAMPLE

▭ PIT BOTTOM

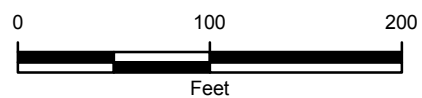


FIGURE 2
SITE MAP
MDP 6
SESW SEC 32-T6S-R91W
GARFIELD COUNTY, COLORADO
VANGUARD OPERATING, LLC



TABLE 1
SOIL ANALYTICAL RESULTS
MDP #6 PIT
GARFIELD COUNTY, COLORADO
VANGUARD OPERATING LLC

PARAMETER	COGCC CONCENTRATION LEVELS	UNITS	PB01	PB02	PB03
Sample Date			4/26/2016	4/26/2016	4/26/2016
Sample Type			Confirmation	Confirmation	Confirmation
Arsenic	0.39	mg/kg	4.5	5.1	6.6
Barium	15,000	mg/kg	160	58	120
Cadmium	70	mg/kg	<0.81	<0.80	<0.79
Chromium (III)	120,000	mg/kg	8.5	9.0	9.9
Chromium (VI)	23	mg/kg	<1.2	<1.1	<1.1
Copper	3,100	mg/kg	10	11	11
Lead	400	mg/kg	10	9.2	11
Mercury	23	mg/kg	0.018	0.014	0.034
Nickel	1,600	mg/kg	11	12	13
Selenium	390	mg/kg	<0.81	<0.80	<0.79
Silver	390	mg/kg	<0.40	<0.40	<0.40
Zinc	23,000	mg/kg	46	50	54
EC	4.0	mmhos/cm	5.2	1.5	0.74
pH	6 - 9	SU	9.4	8.5	8.7
SAR	12	meq/meq	53	6.0	4.2
TPH-GRO		mg/kg	<3.5	<2.9	<2.9
TPH-DRO		mg/kg	6.6	<4.4	<4.4
TPH	500	mg/kg	6.6	<4.4	<4.4
Benzene	0.17	mg/kg	<0.041	<0.035	<0.034
Toluene	85	mg/kg	<0.041	<0.035	<0.034
Ethylbenzene	100	mg/kg	<0.041	<0.035	<0.034
Total Xylenes	175	mg/kg	<0.12	<0.11	<0.10
Acenaphthene	1000	mg/kg	<0.0079	<0.0070	<0.0071
Anthracene	1000	mg/kg	<0.0079	<0.0070	<0.0071
Benzo(A)anthracene	0.22	mg/kg	<0.0079	<0.0070	<0.0071
Benzo(B)fluoranthene	0.22	mg/kg	<0.0079	<0.0070	<0.0071
Benzo(K)fluoranthene	2.2	mg/kg	<0.0079	<0.0070	<0.0071
Benzo(A)pyrene	0.022	mg/kg	<0.0079	<0.0070	<0.0071
Chrysene	22	mg/kg	<0.0079	<0.0070	<0.0071
Dibenzo(A,H)anthracene	0.022	mg/kg	<0.0079	<0.0070	<0.0071
Fluoranthene	1000	mg/kg	<0.0079	<0.0070	<0.0071
Fluorene	1000	mg/kg	<0.0079	<0.0070	<0.0071
Indeno(1,2,3,C,D)pyrene	0.22	mg/kg	<0.0079	<0.0070	<0.0071
Naphthalene	23	mg/kg	<0.0079	<0.0070	<0.0071
Pyrene	1000	mg/kg	<0.0079	0.011	<0.0071

NOTES:

< - less than the stated reporting limit

BOLD indicates result exceeds the COGCC concentration level

COGCC - Colorado Oil and Gas Conservation Commission

EC- electrical conductivity

mg/kg - milligrams per kilogram

mmhos/cm - millimhos per centimeter

NA - not analyzed

SU - standard unit

TPH-GRO - total petroleum hydrocarbons-gasoline range organics

TPH-DRO - total petroleum hydrocarbons-diesel range organics

TPH - combination of TPH-GRO and TPH-DRO



Chris McKisson

From: Lujan - DNR, Carlos <carlos.lujan@state.co.us>
Sent: Tuesday, May 24, 2016 5:03 PM
To: Chris McKisson
Subject: Re: Vanguard - MDP #6 Pit Closure (Facility ID - 430352) (REM 9318)

No problem.

Please send me an email when you submit the form 04. It happens that form 04s are sometimes routed to somebody else at COGCC and that produces some delay because I don't get the notification. And remind me that the correct number is REM #9318 ...

Thanks,
Carlos

Carlos Lujan, Ph.D.
Environmental Protection Specialist
Northwest Region



P 970.625.2497 x7 | F 970.625.2497 | C 970.286.3292
796 Megan Avenue, Suite 201, Rifle, CO 81650
carlos.lujan@state.co.us | www.colorado.gov/cogcc

On Tue, May 24, 2016 at 4:38 PM, Chris McKisson <cmckisson@ltenv.com> wrote:

Carlos

While working on the closure documentation for this project, I noticed that the REM# number was transposed in this email communication. The actual number is 9318 not 9381. I am sending this email make sure there is no confusion when the Form 4 requesting NFA is submitted. Please contact me should you have any questions or concerns.

Thank you

Chris McKisson

Project Environmental Scientist

[\(970\) 285-9985](tel:9702859985) office

[\(970\) 620-5743](tel:9706205743) cell

From: Lujan - DNR, Carlos [mailto:carlos.lujan@state.co.us]
Sent: Friday, May 06, 2016 12:43 PM
To: Chris McKisson <cmckisson@ltenv.com>
Cc: Scott Ghan <sghan@vnrlc.com>; Rob Fishburn <rfishburn@ltenv.com>
Subject: Re: Vanguard - MDP #6 Pit Closure (Facility ID - 430352) (REM 9381)

Chris,

Consider this email an approval to proceed as indicated in your email.

Please mention this approval in the Notice of Completion (and request for NFA) that you will submit via e-form 04 to close the REM Project Number 9381.

Include the lab analysis and the figure ...

Thanks,

and have a great weekend,

Carlos

Carlos Lujan, Ph.D.
Environmental Protection Specialist

Northwest Region



P [970.625.2497](tel:970.625.2497) x7 | F [970.625.2497](tel:970.625.2497) | C [970.286.3292](tel:970.286.3292)
796 Megan Avenue, Suite 201, Rifle, CO 81650
carlos.lujan@state.co.us | www.colorado.gov/cogcc

On Thu, May 5, 2016 at 3:38 PM, Chris McKisson <cmckisson@ltenv.com> wrote:

Carlos,

Attached are a Site Map and Soil Analytical Results Table detailing pit bottom sampling activities at Vanguard's MDP #6 Pit (Facility ID – 430352). If the attached information is acceptable, please provide a written approval to close the pit. This information will also be submitted with the appropriate form to the COGCC requesting NFA for REM Project Number 9381. Vanguard is prepared to begin closure operations upon your approval. Please contact me should you have any questions or require additional information.

Regards,

Chris McKisson

Project Environmental Scientist



COMPLIANCE / ENGINEERING / REMEDIATION

LT Environmental, Inc.

820 Megan Avenue, Unit B

Rifle, Colorado 81650

[\(970\) 285-9985](tel:970.285.9985) office

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cmckisson@ltenv.com

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Please consider the environment before printing this e-mail.



05-May-2016

Chris McKisson
LT Environmental, Inc
820 Megan Ave. Unit B
Rifle, CO 81650

Re: **MDP #6 (59416007)**

Work Order: **16041608**

Dear Chris,

ALS Environmental received 3 samples on 28-Apr-2016 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 26.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager



Certificate No: MN 998501

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Work Order: 16041608

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
16041608-01	PB01	Soil		4/26/2016 13:10	4/28/2016 09:30	<input type="checkbox"/>
16041608-02	PB02	Soil		4/26/2016 13:15	4/28/2016 09:30	<input type="checkbox"/>
16041608-03	PB03	Soil		4/26/2016 13:20	4/28/2016 09:30	<input type="checkbox"/>

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Work Order: 16041608

Case Narrative

Batch 85462, Method ICP_6010_S, Sample 16041608-03B MS/MSD: The MS recovery was above the upper control limit and the RPD between the MS and MSD was outside the control limit for Arsenic.. The corresponding result in the parent sample should be considered estimated.

Batch 85462, Method ICP_6010_S, Sample 16041608-03B MS/MSD: The MS and/or MSD recoveries were outside of the control limits for Barium and Zinc; however, the results in the parent sample are greater than 4x the spike amount. No qualification is required.

Batch 85462, Method ICP_6010_S, Sample 16041608-03B MS: The MS recovery was outside of the control limit for Nickel. However, the MSD recovery and the RPD between the MS and MSD were in control. No qualification is required.

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: 05-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB01
Collection Date: 4/26/2016 01:10 PM

Work Order: 16041608
Lab ID: 16041608-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 5/2/16	Analyst: IT
DRO (C10-C28)	6.6		5.0	mg/Kg-dry	1	5/3/2016 12:15 PM
Surr: 4-Terphenyl-d14	83.3		39-133	%REC	1	5/3/2016 12:15 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/29/16	Analyst: IT
GRO (C6-C10)	ND		3.5	mg/Kg-dry	1	5/2/2016 05:50 PM
Surr: Toluene-d8	98.8		50-150	%REC	1	5/2/2016 05:50 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 5/2/16	Analyst: JEC
Arsenic	4.5		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Barium	160		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Cadmium	ND		0.81	mg/Kg-dry	1	5/2/2016 09:04 PM
Chromium	8.5		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Copper	10		0.81	mg/Kg-dry	1	5/2/2016 09:04 PM
Lead	10		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Nickel	11		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Selenium	ND		0.81	mg/Kg-dry	1	5/2/2016 09:04 PM
Silver	ND		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Zinc	46		0.81	mg/Kg-dry	1	5/2/2016 09:04 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Calcium	18		5.0	mg/L	10	5/4/2016 03:07 AM
Magnesium	4.4		2.0	mg/L	10	5/4/2016 03:07 AM
Sodium	970		2.0	mg/L	10	5/4/2016 12:36 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Sodium Adsorption Ratio	53		0.010	none	1	5/4/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 5/2/16	Analyst: RM
Acenaphthene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Anthracene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Benzo(a)anthracene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Benzo(a)pyrene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Benzo(b)fluoranthene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Benzo(k)fluoranthene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Chrysene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Dibenzo(a,h)anthracene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Fluoranthene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Fluorene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Indeno(1,2,3-cd)pyrene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Naphthalene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 05-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB01
Collection Date: 4/26/2016 01:10 PM

Work Order: 16041608
Lab ID: 16041608-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Pyrene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Surr: 2-Fluorobiphenyl	60.0		12-100	%REC	1	5/3/2016 01:54 AM
Surr: 4-Terphenyl-d14	80.6		25-137	%REC	1	5/3/2016 01:54 AM
Surr: Nitrobenzene-d5	57.6		37-107	%REC	1	5/3/2016 01:54 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/29/16	Analyst: LSY	
Benzene	ND		0.041	mg/Kg-dry	1	5/1/2016 07:57 AM
Ethylbenzene	ND		0.041	mg/Kg-dry	1	5/1/2016 07:57 AM
m,p-Xylene	ND		0.083	mg/Kg-dry	1	5/1/2016 07:57 AM
o-Xylene	ND		0.041	mg/Kg-dry	1	5/1/2016 07:57 AM
Toluene	ND		0.041	mg/Kg-dry	1	5/1/2016 07:57 AM
Xylenes, Total	ND		0.12	mg/Kg-dry	1	5/1/2016 07:57 AM
Surr: 1,2-Dichloroethane-d4	103		70-130	%REC	1	5/1/2016 07:57 AM
Surr: 4-Bromofluorobenzene	95.7		70-130	%REC	1	5/1/2016 07:57 AM
Surr: Dibromofluoromethane	91.3		70-130	%REC	1	5/1/2016 07:57 AM
Surr: Toluene-d8	98.3		70-130	%REC	1	5/1/2016 07:57 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 5/3/16	Analyst: JB	
Electrical Conductivity @ Saturation	5.2		0.12	mmhos/cm @2	25	5/4/2016 09:30 AM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: JB		
Chromium, Trivalent	8.5		0.60	mg/Kg-dry	1	5/5/2016 08:00 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 5/3/16	Analyst: MB	
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	5/4/2016 04:00 PM
MOISTURE			SW3550C	Analyst: LW		
Moisture	16		0.050	% of sample	1	4/29/2016 06:30 PM
PH			SW9045D	Prep: EXTRACT / 5/2/16	Analyst: STP	
pH	9.4		s.u.	1		5/2/2016 04:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 05-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB02
Collection Date: 4/26/2016 01:15 PM

Work Order: 16041608
Lab ID: 16041608-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 5/2/16	Analyst: IT
DRO (C10-C28)	ND		4.4	mg/Kg-dry	1	5/3/2016 12:45 PM
Surr: 4-Terphenyl-d14	80.3		39-133	%REC	1	5/3/2016 12:45 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/29/16	Analyst: IT
GRO (C6-C10)	ND		2.9	mg/Kg-dry	1	5/2/2016 06:15 PM
Surr: Toluene-d8	100		50-150	%REC	1	5/2/2016 06:15 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 5/2/16	Analyst: JEC
Arsenic	5.1		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Barium	58		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Cadmium	ND		0.80	mg/Kg-dry	1	5/2/2016 09:09 PM
Chromium	9.0		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Copper	11		0.80	mg/Kg-dry	1	5/2/2016 09:09 PM
Lead	9.2		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Nickel	12		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Selenium	ND		0.80	mg/Kg-dry	1	5/2/2016 09:09 PM
Silver	ND		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Zinc	50		0.80	mg/Kg-dry	1	5/2/2016 09:09 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Calcium	50		5.0	mg/L	10	5/4/2016 03:13 AM
Magnesium	15		2.0	mg/L	10	5/4/2016 03:13 AM
Sodium	190		2.0	mg/L	10	5/4/2016 12:42 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Sodium Adsorption Ratio	6.0		0.010	none	1	5/4/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 5/2/16	Analyst: RM
Acenaphthene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Anthracene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Benzo(a)anthracene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Benzo(a)pyrene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Benzo(b)fluoranthene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Benzo(k)fluoranthene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Chrysene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Dibenzo(a,h)anthracene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Fluoranthene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Fluorene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Indeno(1,2,3-cd)pyrene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Naphthalene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 05-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB02
Collection Date: 4/26/2016 01:15 PM

Work Order: 16041608
Lab ID: 16041608-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Pyrene	0.011		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Surr: 2-Fluorobiphenyl	81.9		12-100	%REC	1	5/3/2016 02:14 AM
Surr: 4-Terphenyl-d14	80.4		25-137	%REC	1	5/3/2016 02:14 AM
Surr: Nitrobenzene-d5	89.4		37-107	%REC	1	5/3/2016 02:14 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B		Prep: SW5035 / 4/29/16	Analyst: LSY
Benzene	ND		0.035	mg/Kg-dry	1	5/1/2016 08:22 AM
Ethylbenzene	ND		0.035	mg/Kg-dry	1	5/1/2016 08:22 AM
m,p-Xylene	ND		0.070	mg/Kg-dry	1	5/1/2016 08:22 AM
o-Xylene	ND		0.035	mg/Kg-dry	1	5/1/2016 08:22 AM
Toluene	ND		0.035	mg/Kg-dry	1	5/1/2016 08:22 AM
Xylenes, Total	ND		0.11	mg/Kg-dry	1	5/1/2016 08:22 AM
Surr: 1,2-Dichloroethane-d4	101		70-130	%REC	1	5/1/2016 08:22 AM
Surr: 4-Bromofluorobenzene	97.2		70-130	%REC	1	5/1/2016 08:22 AM
Surr: Dibromofluoromethane	92.0		70-130	%REC	1	5/1/2016 08:22 AM
Surr: Toluene-d8	98.4		70-130	%REC	1	5/1/2016 08:22 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep: USDA Method 20B / 5/3/16	Analyst: JB
Electrical Conductivity @ Saturation	1.5		0.050	mmhos/cm @2	10	5/4/2016 09:30 AM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JB
Chromium, Trivalent	9.0		0.54	mg/Kg-dry	1	5/5/2016 08:00 AM
CHROMIUM, HEXAVALENT			SW7196A		Prep: SW3060A / 5/3/16	Analyst: MB
Chromium, Hexavalent	ND		1.1	mg/Kg-dry	1	5/4/2016 04:00 PM
MOISTURE			SW3550C			Analyst: LW
Moisture	7.7		0.050	% of sample	1	4/29/2016 06:30 PM
PH			SW9045D		Prep: EXTRACT / 5/2/16	Analyst: STP
pH	8.5			s.u.	1	5/2/2016 04:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 05-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB03
Collection Date: 4/26/2016 01:20 PM

Work Order: 16041608
Lab ID: 16041608-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 5/2/16	Analyst: IT
DRO (C10-C28)	ND		4.4	mg/Kg-dry	1	5/3/2016 01:15 AM
Surr: 4-Terphenyl-d14	81.7		39-133	%REC	1	5/3/2016 01:15 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/29/16	Analyst: IT
GRO (C6-C10)	ND		2.9	mg/Kg-dry	1	5/2/2016 06:40 PM
Surr: Toluene-d8	102		50-150	%REC	1	5/2/2016 06:40 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 5/2/16	Analyst: JEC
Arsenic	6.6		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Barium	120		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Cadmium	ND		0.79	mg/Kg-dry	1	5/2/2016 09:15 PM
Chromium	9.9		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Copper	11		0.79	mg/Kg-dry	1	5/2/2016 09:15 PM
Lead	11		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Nickel	13		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Selenium	ND		0.79	mg/Kg-dry	1	5/3/2016 04:19 PM
Silver	ND		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Zinc	54		0.79	mg/Kg-dry	1	5/2/2016 09:15 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Calcium	28		5.0	mg/L	10	5/4/2016 03:18 AM
Magnesium	9.0		2.0	mg/L	10	5/4/2016 03:18 AM
Sodium	100		2.0	mg/L	10	5/4/2016 12:48 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Sodium Adsorption Ratio	4.2		0.010	none	1	5/4/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 5/2/16	Analyst: RM
Acenaphthene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Anthracene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Benzo(a)anthracene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Benzo(a)pyrene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Benzo(b)fluoranthene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Benzo(k)fluoranthene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Chrysene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Dibenzo(a,h)anthracene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Fluoranthene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Fluorene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Indeno(1,2,3-cd)pyrene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Naphthalene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 05-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB03
Collection Date: 4/26/2016 01:20 PM

Work Order: 16041608
Lab ID: 16041608-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Pyrene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Surr: 2-Fluorobiphenyl	71.8		12-100	%REC	1	5/3/2016 02:34 AM
Surr: 4-Terphenyl-d14	83.7		25-137	%REC	1	5/3/2016 02:34 AM
Surr: Nitrobenzene-d5	82.3		37-107	%REC	1	5/3/2016 02:34 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/29/16	Analyst: LSY	
Benzene	ND		0.034	mg/Kg-dry	1	5/1/2016 08:47 AM
Ethylbenzene	ND		0.034	mg/Kg-dry	1	5/1/2016 08:47 AM
m,p-Xylene	ND		0.069	mg/Kg-dry	1	5/1/2016 08:47 AM
o-Xylene	ND		0.034	mg/Kg-dry	1	5/1/2016 08:47 AM
Toluene	ND		0.034	mg/Kg-dry	1	5/1/2016 08:47 AM
Xylenes, Total	ND		0.10	mg/Kg-dry	1	5/1/2016 08:47 AM
Surr: 1,2-Dichloroethane-d4	104		70-130	%REC	1	5/1/2016 08:47 AM
Surr: 4-Bromofluorobenzene	95.6		70-130	%REC	1	5/1/2016 08:47 AM
Surr: Dibromofluoromethane	91.4		70-130	%REC	1	5/1/2016 08:47 AM
Surr: Toluene-d8	97.4		70-130	%REC	1	5/1/2016 08:47 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 5/3/16	Analyst: JB	
Electrical Conductivity @ Saturation	0.74		0.050	mmhos/cm @2	10	5/4/2016 09:30 AM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: JB		
Chromium, Trivalent	9.9		0.54	mg/Kg-dry	1	5/5/2016 08:00 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 5/3/16	Analyst: MB	
Chromium, Hexavalent	ND		1.1	mg/Kg-dry	1	5/4/2016 04:00 PM
MOISTURE			SW3550C	Analyst: LW		
Moisture	6.8		0.050	% of sample	1	4/29/2016 06:30 PM
PH			SW9045D	Prep: EXTRACT / 5/2/16	Analyst: STP	
pH	8.7			s.u.	1	5/2/2016 04:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 05-May-16

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85471** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-85471-85471				Units: mg/Kg		Analysis Date: 5/2/2016 05:45 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806100		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	ND	5.0								
<i>Surr: 4-Terphenyl-d14</i>	1.566	0	2	0	78.3	39-133	0			

LCS		Sample ID: DLCSS1-85471-85471				Units: mg/Kg		Analysis Date: 5/2/2016 06:15 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806101		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	163.8	5.0	200	0	81.9	61-109	0			
<i>Surr: 4-Terphenyl-d14</i>	1.54	0	2	0	77	39-133	0			

MS		Sample ID: 16041442-01A MS				Units: mg/Kg		Analysis Date: 5/2/2016 06:45 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806102		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	144.7	4.1	165.6	8.485	82.3	48-110	0			
<i>Surr: 4-Terphenyl-d14</i>	1.679	0	1.656	0	101	39-133	0			

MSD		Sample ID: 16041442-01A MSD				Units: mg/Kg		Analysis Date: 5/2/2016 07:15 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806103		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	144.4	4.1	163.4	8.485	83.2	48-110	144.7	0.167	30	
<i>Surr: 4-Terphenyl-d14</i>	1.518	0	1.634	0	92.9	39-133	1.679	10.1	30	

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
 Work Order: 16041608
 Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85408** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-85408-85408				Units: µg/Kg-dry		Analysis Date: 5/2/2016 11:20 AM		
Client ID:		Run ID: GC9_160502A				SeqNo: 3805236		Prep Date: 4/29/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	4618	0	5000	0	92.4	50-150	0			

LCS		Sample ID: LCS-85408-85408				Units: µg/Kg-dry		Analysis Date: 5/2/2016 10:55 AM		
Client ID:		Run ID: GC9_160502A				SeqNo: 3805235		Prep Date: 4/29/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	482300	2,500	500000	0	96.5	70-130	0			
Surr: Toluene-d8	4782	0	5000	0	95.6	50-150	0			

MS		Sample ID: 16041606-02A MS				Units: µg/Kg-dry		Analysis Date: 5/2/2016 02:58 PM		
Client ID:		Run ID: GC9_160502A				SeqNo: 3805244		Prep Date: 4/29/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	673900	3,500	690500	0	97.6	70-130	0			
Surr: Toluene-d8	6822	0	6905	0	98.8	50-150	0			

MSD		Sample ID: 16041606-02A MSD				Units: µg/Kg-dry		Analysis Date: 5/2/2016 03:47 PM		
Client ID:		Run ID: GC9_160502A				SeqNo: 3805245		Prep Date: 4/29/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	658900	3,500	690500	0	95.4	70-130	673900	2.25	30	
Surr: Toluene-d8	6538	0	6905	0	94.7	50-150	6822	4.25	30	

The following samples were analyzed in this batch:

16041608-01A	16041608-02A	16041608-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85415** Instrument ID **ICP2** Method: **SW846 6010C**

DUP		Sample ID: 16041581-01ADUP				Units: mg/L		Analysis Date: 5/4/2016 03:52 AM		
Client ID:		Run ID: ICP2_160503B				SeqNo: 3809461		Prep Date: 5/3/2016		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	185.7	5.0	0	0	0	0-0	186.7	0.534		
Magnesium	16.94	2.0	0	0	0	0-0	17.19	1.45		
Sodium	236.2	2.0	0	0	0	0-0	236.1	0.0391		

DUP		Sample ID: 16041581-01ADUP				Units: none		Analysis Date: 5/4/2016		
Client ID:		Run ID: SAR_160504A				SeqNo: 3810543		Prep Date: 5/3/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	4.449	0.010	0	0	0		4.433	0.366	50	

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85462** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: MBLK-85462-85462				Units: mg/Kg		Analysis Date: 5/2/2016 07:51 PM		
Client ID:		Run ID: ICP2_160502A				SeqNo: 3806444		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	0.0796	0.50								J
Chromium	ND	0.25								
Copper	ND	0.50								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								
Zinc	0.07734	0.50								J

LCS		Sample ID: LCS-85462-85462				Units: mg/Kg		Analysis Date: 5/2/2016 07:56 PM		
Client ID:		Run ID: ICP2_160502A				SeqNo: 3806445		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.669	0.25	5	0	93.4	80-120	0			
Barium	4.521	0.25	5	0	90.4	80-120	0			
Cadmium	4.662	0.50	5	0	93.2	80-120	0			
Chromium	4.557	0.25	5	0	91.1	80-120	0			
Copper	4.643	0.50	5	0	92.9	80-120	0			
Lead	4.494	0.25	5	0	89.9	80-120	0			
Nickel	4.657	0.25	5	0	93.1	80-120	0			
Selenium	4.63	0.50	5	0	92.6	80-120	0			
Silver	4.518	0.25	5	0	90.4	80-120	0			
Zinc	4.673	0.50	5	0	93.5	80-120	0			

MS		Sample ID: 16041608-03BMS				Units: mg/Kg		Analysis Date: 5/2/2016 09:20 PM		
Client ID: PB03		Run ID: ICP2_160502A				SeqNo: 3806461		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	24.61	0.37	7.375	6.143	250	75-125	0			S
Barium	137.3	0.37	7.375	116.3	286	75-125	0			SO
Cadmium	7.082	0.74	7.375	0.1945	93.4	75-125	0			
Chromium	17.22	0.37	7.375	9.274	108	75-125	0			
Copper	17.64	0.74	7.375	10.45	97.5	75-125	0			
Lead	17.47	0.37	7.375	10.29	97.4	75-125	0			
Nickel	16.91	0.37	7.375	12.19	64.1	75-125	0			S
Selenium	7.747	0.74	7.375	0.8122	94	75-125	0			
Silver	6.627	0.37	7.375	-0.09342	91.1	75-125	0			
Zinc	55.7	0.74	7.375	50.19	74.6	75-125	0			SO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85462**

Instrument ID **ICP2**

Method: **SW846 6010C**

MSD				Sample ID: 16041608-03BMSD			Units: mg/Kg		Analysis Date: 5/2/2016 09:26 PM		
Client ID: PB03			Run ID: ICP2_160502A			SeqNo: 3806462		Prep Date: 5/2/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	13.76	0.37	7.364	6.143	103	75-125	24.61	56.5	20	R	
Barium	136.9	0.37	7.364	116.3	281	75-125	137.3	0.281	20	SO	
Cadmium	6.964	0.74	7.364	0.1945	91.9	75-125	7.082	1.67	20		
Chromium	17.91	0.37	7.364	9.274	117	75-125	17.22	3.92	20		
Copper	16.93	0.74	7.364	10.45	88	75-125	17.64	4.1	20		
Lead	16.02	0.37	7.364	10.29	77.8	75-125	17.47	8.67	20		
Nickel	18.71	0.37	7.364	12.19	88.6	75-125	16.91	10.1	20		
Selenium	7.858	0.74	7.364	0.8122	95.7	75-125	7.747	1.42	20		
Silver	6.689	0.37	7.364	-0.09342	92.1	75-125	6.627	0.939	20		
Zinc	58.99	0.74	7.364	50.19	119	75-125	55.7	5.74	20	O	

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85435** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-85435-85435				Units: µg/Kg		Analysis Date: 5/2/2016 06:21 PM		
Client ID:		Run ID: SVMS8_160502A				SeqNo: 3806051		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
<i>Surr: 2-Fluorobiphenyl</i>	811.7	0	1667	0	48.7	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1698	0	1667	0	102	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	932.7	0	1667	0	56	37-107	0			

LCS		Sample ID: SLCSS1-85435-85435				Units: µg/Kg		Analysis Date: 5/2/2016 06:42 PM		
Client ID:		Run ID: SVMS8_160502A				SeqNo: 3806052		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	533.7	6.7	666.7	0	80	45-110	0			
Anthracene	696.7	6.7	666.7	0	104	55-105	0			
Benzo(a)anthracene	672.7	6.7	666.7	0	101	50-110	0			
Benzo(a)pyrene	709.7	6.7	666.7	0	106	50-110	0			
Benzo(b)fluoranthene	689.7	6.7	666.7	0	103	45-115	0			
Benzo(k)fluoranthene	718	6.7	666.7	0	108	45-115	0			
Chrysene	663.3	6.7	666.7	0	99.5	55-110	0			
Dibenzo(a,h)anthracene	684.3	6.7	666.7	0	103	40-125	0			
Fluoranthene	710.7	6.7	666.7	0	107	55-115	0			
Fluorene	583.7	6.7	666.7	0	87.5	50-110	0			
Indeno(1,2,3-cd)pyrene	753.3	6.7	666.7	0	113	40-120	0			
Naphthalene	528	6.7	666.7	0	79.2	40-105	0			
Pyrene	723.3	6.7	666.7	0	108	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1280	0	1667	0	76.8	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1738	0	1667	0	104	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1409	0	1667	0	84.5	37-107	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
 Work Order: 16041608
 Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85435** Instrument ID **SVMS8** Method: **SW846 8270D**

MS				Sample ID: 16041582-02B MS			Units: µg/Kg		Analysis Date: 5/2/2016 07:31 PM	
Client ID:		Run ID: SVMS8_160502A			SeqNo: 3806053		Prep Date: 5/2/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	489.2	6.6	661.6	0	73.9	45-110	0			
Anthracene	613.9	6.6	661.6	0	92.8	55-105	0			
Benzo(a)anthracene	628.1	6.6	661.6	0	94.9	50-110	0			
Benzo(a)pyrene	657.9	6.6	661.6	0	99.4	50-110	0			
Benzo(b)fluoranthene	636.4	6.6	661.6	0	96.2	45-115	0			
Benzo(k)fluoranthene	612.2	6.6	661.6	0	92.5	45-115	0			
Chrysene	609.6	6.6	661.6	0	92.1	55-110	0			
Dibenzo(a,h)anthracene	591.7	6.6	661.6	0	89.4	40-125	0			
Fluoranthene	672.1	6.6	661.6	0	102	55-115	0			
Fluorene	521.9	6.6	661.6	0	78.9	50-110	0			
Indeno(1,2,3-cd)pyrene	648.6	6.6	661.6	0	98	40-120	0			
Naphthalene	518.6	6.6	661.6	0	78.4	40-105	0			
Pyrene	677.7	6.6	661.6	0	102	45-125	0			
Surr: 2-Fluorobiphenyl	1244	0	1654	0	75.2	12-100	0			
Surr: 4-Terphenyl-d14	1602	0	1654	0	96.9	25-137	0			
Surr: Nitrobenzene-d5	1253	0	1654	0	75.8	37-107	0			

MSD				Sample ID: 16041582-02B MSD			Units: µg/Kg		Analysis Date: 5/2/2016 07:51 PM	
Client ID:		Run ID: SVMS8_160502A			SeqNo: 3806054		Prep Date: 5/2/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	504	6.6	660.1	0	76.3	45-110	489.2	2.98	30	
Anthracene	645.2	6.6	660.1	0	97.7	55-105	613.9	4.98	30	
Benzo(a)anthracene	638.6	6.6	660.1	0	96.7	50-110	628.1	1.66	30	
Benzo(a)pyrene	677.9	6.6	660.1	0	103	50-110	657.9	3	30	
Benzo(b)fluoranthene	642.9	6.6	660.1	0	97.4	45-115	636.4	1.02	30	
Benzo(k)fluoranthene	641.6	6.6	660.1	0	97.2	45-115	612.2	4.68	30	
Chrysene	620.2	6.6	660.1	0	93.9	55-110	609.6	1.72	30	
Dibenzo(a,h)anthracene	646.9	6.6	660.1	0	98	40-125	591.7	8.9	30	
Fluoranthene	705.6	6.6	660.1	0	107	55-115	672.1	4.87	30	
Fluorene	556.8	6.6	660.1	0	84.3	50-110	521.9	6.46	30	
Indeno(1,2,3-cd)pyrene	718.2	6.6	660.1	0	109	40-120	648.6	10.2	30	
Naphthalene	455.8	6.6	660.1	0	69	40-105	518.6	12.9	30	
Pyrene	694.1	6.6	660.1	0	105	45-125	677.7	2.38	30	
Surr: 2-Fluorobiphenyl	1145	0	1650	0	69.4	12-100	1244	8.29	40	
Surr: 4-Terphenyl-d14	1639	0	1650	0	99.3	25-137	1602	2.29	40	
Surr: Nitrobenzene-d5	1194	0	1650	0	72.3	37-107	1253	4.86	40	

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
 Work Order: 16041608
 Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85407** Instrument ID **VMS9** Method: **SW8260B**

MBLK				Sample ID: MBLK-85407-85407				Units: µg/Kg-dry			Analysis Date: 4/30/2016 01:33 PM		
Client ID:			Run ID: VMS9_160430A				SeqNo: 3804023		Prep Date: 4/29/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	ND	30											
Ethylbenzene	ND	30											
m,p-Xylene	ND	60											
o-Xylene	ND	30											
Toluene	ND	30											
Xylenes, Total	ND	90											
Surr: 1,2-Dichloroethane-d4	1030	0	1000	0	103	70-130		0					
Surr: 4-Bromofluorobenzene	966	0	1000	0	96.6	70-130		0					
Surr: Dibromofluoromethane	987	0	1000	0	98.7	70-130		0					
Surr: Toluene-d8	955.5	0	1000	0	95.6	70-130		0					

LCS				Sample ID: LCS-85407-85407			Units: µg/Kg-dry		Analysis Date: 4/30/2016 11:55 AM		
Client ID:			Run ID: VMS9_160430A			SeqNo: 3804022		Prep Date: 4/29/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1018	30	1000	0	102	75-125	0				
Ethylbenzene	1068	30	1000	0	107	75-125	0				
m,p-Xylene	2208	60	2000	0	110	80-125	0				
o-Xylene	1077	30	1000	0	108	75-125	0				
Toluene	1059	30	1000	0	106	70-125	0				
Xylenes, Total	3284	90	3000	0	109	75-125	0				
Surr: 1,2-Dichloroethane-d4	981	0	1000	0	98.1	70-130	0				
Surr: 4-Bromofluorobenzene	1029	0	1000	0	103	70-130	0				
Surr: Dibromofluoromethane	1004	0	1000	0	100	70-130	0				
Surr: Toluene-d8	1018	0	1000	0	102	70-130	0				

MS				Sample ID: 16041606-02A MS			Units: µg/Kg-dry		Analysis Date: 5/1/2016 10:01 AM		
Client ID:			Run ID: VMS9_160430B			SeqNo: 3804520		Prep Date: 4/29/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1414	41	1381	0	102	75-125	0				
Ethylbenzene	1438	41	1381	0	104	75-125	0				
m,p-Xylene	2950	83	2762	0	107	80-125	0				
o-Xylene	1467	41	1381	0	106	75-125	0				
Toluene	1420	41	1381	0	103	70-125	0				
Xylenes, Total	4417	120	4143	0	107	75-125	0				
Surr: 1,2-Dichloroethane-d4	1387	0	1381	0	100	70-130	0				
Surr: 4-Bromofluorobenzene	1525	0	1381	0	110	70-130	0				
Surr: Dibromofluoromethane	1288	0	1381	0	93.3	70-130	0				
Surr: Toluene-d8	1389	0	1381	0	101	70-130	0				

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
 Work Order: 16041608
 Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85407** Instrument ID **VMS9** Method: **SW8260B**

MSD				Sample ID: 16041606-02A MSD			Units: µg/Kg-dry		Analysis Date: 5/1/2016 10:25 AM		
Client ID:			Run ID: VMS9_160430B			SeqNo: 3804522		Prep Date: 4/29/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1435	41	1381	0	104	75-125	1414	1.45	30		
Ethylbenzene	1426	41	1381	0	103	75-125	1438	0.868	30		
m,p-Xylene	2933	83	2762	0	106	80-125	2950	0.587	30		
o-Xylene	1482	41	1381	0	107	75-125	1467	1.03	30		
Toluene	1387	41	1381	0	100	70-125	1420	2.31	30		
Xylenes, Total	4415	120	4143	0	107	75-125	4417	0.0469	30		
Surr: 1,2-Dichloroethane-d4	1355	0	1381	0	98.1	70-130	1387	2.37	30		
Surr: 4-Bromofluorobenzene	1489	0	1381	0	108	70-130	1525	2.38	30		
Surr: Dibromofluoromethane	1299	0	1381	0	94.1	70-130	1288	0.854	30		
Surr: Toluene-d8	1372	0	1381	0	99.4	70-130	1389	1.25	30		

The following samples were analyzed in this batch:

16041608-01A	16041608-02A	16041608-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85415** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 16041581-01A DUP				Units: mmhos/cm @25°		Analysis Date: 5/4/2016 09:30 AM		
Client ID:		Run ID: WETCHEM_160504C				SeqNo: 3808954		Prep Date: 5/3/2016		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	2.32	0.050	0	0	0		2.29	1.3	50	

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85485** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-85485-85485				Units: s.u.		Analysis Date: 5/2/2016 04:30 PM		
Client ID:		Run ID: WETCHEM_160502L				SeqNo: 3805295		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 3.99 0 4 0 99.8 90-110 0

DUP		Sample ID: 16041606-05B DUP				Units: s.u.		Analysis Date: 5/2/2016 04:30 PM		
Client ID:		Run ID: WETCHEM_160502L				SeqNo: 3805303		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 8.67 0 0 0 0 0-0 8.73 0.69 20

DUP				Sample ID: 16041608-03B DUP				Units: s.u.			Analysis Date: 5/2/2016 04:30 PM			
Client ID: PB03				Run ID: WETCHEM_160502L				SeqNo: 3805309			Prep Date: 5/2/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				

pH 8.73 0 0 0 0 0-0 8.66 0.805 20

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85608** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-85608-85608				Units: mg/Kg		Analysis Date: 5/4/2016 04:00 PM		
Client ID:		Run ID: WETCHEM_160504S		SeqNo: 3810952		Prep Date: 5/3/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.98

LCS		Sample ID: LCS-85608-85608				Units: mg/Kg		Analysis Date: 5/4/2016 04:00 PM		
Client ID:		Run ID: WETCHEM_160504S		SeqNo: 3810951		Prep Date: 5/3/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.465 0.99 4.95 0 90.2 80-120 0

MS		Sample ID: 16041608-03B MS				Units: mg/Kg		Analysis Date: 5/4/2016 04:00 PM		
Client ID: PB03		Run ID: WETCHEM_160504S		SeqNo: 3810945		Prep Date: 5/3/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.667 0.98 4.902 0.2451 90.2 75-125 0

MS		Sample ID: 16041608-03B MSI				Units: mg/Kg		Analysis Date: 5/4/2016 04:00 PM		
Client ID: PB03		Run ID: WETCHEM_160504S		SeqNo: 3810947		Prep Date: 5/3/2016		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2970 99 3027 0.2451 98.1 75-125 0

MSD		Sample ID: 16041608-03B MSD				Units: mg/Kg		Analysis Date: 5/4/2016 04:00 PM		
Client ID: PB03		Run ID: WETCHEM_160504S		SeqNo: 3810946		Prep Date: 5/3/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.594 0.99 4.95 0.2451 87.8 75-125 4.667 1.57 20

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **R186511** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R186511				Units: % of sample		Analysis Date: 4/29/2016 06:30 PM		
Client ID:		Run ID: MOIST_160429B				SeqNo: 3803548		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS		Sample ID: LCS-R186511				Units: % of sample		Analysis Date: 4/29/2016 06:30 PM		
Client ID:		Run ID: MOIST_160429B				SeqNo: 3803547		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: 16041580-01A DUP				Units: % of sample		Analysis Date: 4/29/2016 06:30 PM		
Client ID:		Run ID: MOIST_160429B				SeqNo: 3803526		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 15.12 0.050 0 0 0 14.89 1.53 20

DUP		Sample ID: 16041618-01B DUP				Units: % of sample		Analysis Date: 4/29/2016 06:30 PM		
Client ID:		Run ID: MOIST_160429B				SeqNo: 3803542		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.98 0.050 0 0 0 14.87 0.737 20

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.



☐ ALS Environmental
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Chain of Custody Form

Page 1 of 1

☒ ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

Customer Information		Project Information					Parameter/Method Request for Analysis													
Purchase Order		Project Name	MDP #6					A	TPH GRO/DRO											
Work Order		Project Number	59416007					B	BTEX											
Company Name	LT Environmental	Bill To Company	LT Environmental					C	Table 910 PAHs											
Sand Report To	Chris McKisson	Invoice Attn	ap@ltenv.com					D	Table 910 Metals											
Address	820 Megan Ave. Unit B	Address	820 Megan Ave. Unit B					E	EC											
City/State/Zip	Rifle, CO 81637	City/State/Zip	Rifle, CO 81637					F	SAR											
Phone	(970) 285-9985	Phone	(970) 285-9985					G	pH											
Fax		Fax						H	Total Arsenic 6020											
e-Mail Address: cmckisson@ltenv.com, rfishburn@ltenv.com								I												
								J												
No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold			
1	PB01	4/26/2016	13:10	Soil	none	3	x	x	x	x	x	x	x	x						
2	PB02	4/26/2016	13:15	Soil	none	3	x	x	x	x	x	x	x	x						
3	PB03	4/26/2016	13:20	Soil	none	3	x	x	x	x	x	x	x	x						
4																				
5																				
6																				
7																				
8																				
9																				
10																				
Sampler(s): Please Print & Sign <i>Steve Scivigliano / Steve Scivigliano</i>		Shipment Method:		Required Turnaround Time: (Check Box) <input type="checkbox"/> 10 Wk Days <input checked="" type="checkbox"/> 15 Wk Days <input type="checkbox"/> 3 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour				Results Due Date:												
Relinquished by: <i>Steve Scivigliano</i>		Date: 4/26/16	Time: 15:08	Received by: <i>W</i>		Date: 4-26-16	Time: 1508	Notes: 5 day standard TAT per Bruce S.												
Relinquished by: <i>W</i>		Date: 4/26/16	Time: 1600	Received by Laboratory:		Date: 4/29/16	Time: 0930	ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)										
Logged by (Laboratory): <i>Ken</i>		Date: 4/28/16	Time: 1450	Checked by (Laboratory): <i>C</i>					110C	<input type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Raw Data <input type="checkbox"/> TRRP LRC <input type="checkbox"/> TRRP Level IV <input type="checkbox"/> Level IV: SW846 Methods/CLP like <input type="checkbox"/> Other:										
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C																				

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

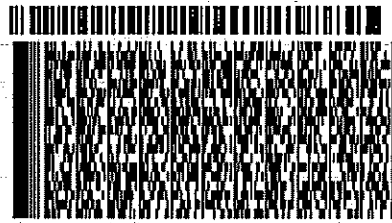
ORIGIN ID: RILA (818) 298-1033
 NICK MARTINEZ
 ALS ENVIRONMENTAL PARACHUTE
 PARACHUTE SERVICE CENTER
 127 EAST 1ST ST
 PARACHUTE, CO 81635
 UNITED STATES US

SHIP DATE: 28APR16
 ACTWGT: 55.00 LB
 CAD: 2264840/NET3730
 DIMS: 24x15x15 IN
 BILL SENDER

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

HOLLAND MI 49424

(818) 399-8070 REF: 042616-1
 NV
 PO: PARACHUTE DEPT:

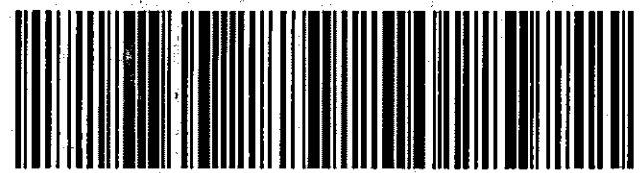


REL#
 3785346

2 of 3
 WED - 27 APR 10:30A
 PRIORITY OVERNIGHT
 MP6# 7762 0106 7705
 Mstr# 7762 0106 7083 0201

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GRR
 MI-US



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2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number. Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Sample Receipt Checklist

Client Name: **LTEV**

Date/Time Received: **28-Apr-16 09:30**

Work Order: **16041608**

Received by: **KRW**

Checklist completed by Keith Wurenga
eSignature

28-Apr-16
Date

Reviewed by: Chad Whelton
eSignature

29-Apr-16
Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>1.0/1.0 C</u> <u>SR2</u>		
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>4/28/2016 3:02:23 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



06-May-2016

Chris McKisson
LT Environmental, Inc
820 Megan Ave. Unit B
Rifle, CO 81650

Re: **MDP #6 (59416007)**

Work Order: **16041608**

Dear Chris,

ALS Environmental received 3 samples on 28-Apr-2016 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 27.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager



Certificate No: MN 998501

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

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Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Work Order: 16041608**Work Order Sample Summary**

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
16041608-01	PB01	Soil		4/26/2016 13:10	4/28/2016 09:30	<input type="checkbox"/>
16041608-02	PB02	Soil		4/26/2016 13:15	4/28/2016 09:30	<input type="checkbox"/>
16041608-03	PB03	Soil		4/26/2016 13:20	4/28/2016 09:30	<input type="checkbox"/>

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Work Order: 16041608

Case Narrative

Batch 85462, Method ICP_6010_S, Sample 16041608-03B MS/MSD: The MS recovery was above the upper control limit and the RPD between the MS and MSD was outside the control limit for Arsenic.. The corresponding result in the parent sample should be considered estimated.

Batch 85462, Method ICP_6010_S, Sample 16041608-03B MS/MSD: The MS and/or MSD recoveries were outside of the control limits for Barium and Zinc; however, the results in the parent sample are greater than 4x the spike amount. No qualification is required.

Batch 85462, Method ICP_6010_S, Sample 16041608-03B MS: The MS recovery was outside of the control limit for Nickel. However, the MSD recovery and the RPD between the MS and MSD were in control. No qualification is required.

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: 06-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB01
Collection Date: 4/26/2016 01:10 PM

Work Order: 16041608
Lab ID: 16041608-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 5/2/16	Analyst: IT
DRO (C10-C28)	6.6		5.0	mg/Kg-dry	1	5/3/2016 12:15 PM
Surr: 4-Terphenyl-d14	83.3		39-133	%REC	1	5/3/2016 12:15 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/29/16	Analyst: IT
GRO (C6-C10)	ND		3.5	mg/Kg-dry	1	5/2/2016 05:50 PM
Surr: Toluene-d8	98.8		50-150	%REC	1	5/2/2016 05:50 PM
MERCURY BY CVAA						
			SW7471B		Prep: SW7471 / 5/5/16	Analyst: LR
Mercury	0.018		0.016	mg/Kg-dry	1	5/6/2016 01:40 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 5/2/16	Analyst: JEC
Arsenic	4.5		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Barium	160		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Cadmium	ND		0.81	mg/Kg-dry	1	5/2/2016 09:04 PM
Chromium	8.5		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Copper	10		0.81	mg/Kg-dry	1	5/2/2016 09:04 PM
Lead	10		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Nickel	11		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Selenium	ND		0.81	mg/Kg-dry	1	5/2/2016 09:04 PM
Silver	ND		0.40	mg/Kg-dry	1	5/2/2016 09:04 PM
Zinc	46		0.81	mg/Kg-dry	1	5/2/2016 09:04 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Calcium	18		5.0	mg/L	10	5/4/2016 03:07 AM
Magnesium	4.4		2.0	mg/L	10	5/4/2016 03:07 AM
Sodium	970		2.0	mg/L	10	5/4/2016 12:36 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Sodium Adsorption Ratio	53		0.010	none	1	5/4/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 5/2/16	Analyst: RM
Acenaphthene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Anthracene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Benzo(a)anthracene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Benzo(a)pyrene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Benzo(b)fluoranthene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Benzo(k)fluoranthene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Chrysene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Dibenzo(a,h)anthracene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Fluoranthene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB01
Collection Date: 4/26/2016 01:10 PM

Work Order: 16041608
Lab ID: 16041608-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Indeno(1,2,3-cd)pyrene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Naphthalene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Pyrene	ND		0.0079	mg/Kg-dry	1	5/3/2016 01:54 AM
Surr: 2-Fluorobiphenyl	60.0		12-100	%REC	1	5/3/2016 01:54 AM
Surr: 4-Terphenyl-d14	80.6		25-137	%REC	1	5/3/2016 01:54 AM
Surr: Nitrobenzene-d5	57.6		37-107	%REC	1	5/3/2016 01:54 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/29/16		Analyst: LSY
Benzene	ND		0.041	mg/Kg-dry	1	5/1/2016 07:57 AM
Ethylbenzene	ND		0.041	mg/Kg-dry	1	5/1/2016 07:57 AM
m,p-Xylene	ND		0.083	mg/Kg-dry	1	5/1/2016 07:57 AM
o-Xylene	ND		0.041	mg/Kg-dry	1	5/1/2016 07:57 AM
Toluene	ND		0.041	mg/Kg-dry	1	5/1/2016 07:57 AM
Xylenes, Total	ND		0.12	mg/Kg-dry	1	5/1/2016 07:57 AM
Surr: 1,2-Dichloroethane-d4	103		70-130	%REC	1	5/1/2016 07:57 AM
Surr: 4-Bromofluorobenzene	95.7		70-130	%REC	1	5/1/2016 07:57 AM
Surr: Dibromofluoromethane	91.3		70-130	%REC	1	5/1/2016 07:57 AM
Surr: Toluene-d8	98.3		70-130	%REC	1	5/1/2016 07:57 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 5/3/16		Analyst: JB
Electrical Conductivity @ Saturation	5.2		0.12	mmhos/cm @2	25	5/4/2016 09:30 AM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JB
Chromium, Trivalent	8.5		0.60	mg/Kg-dry	1	5/5/2016 08:00 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 5/3/16		Analyst: MB
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	5/4/2016 04:00 PM
MOISTURE			SW3550C			Analyst: LW
Moisture	16		0.050	% of sample	1	4/29/2016 06:30 PM
PH			SW9045D	Prep: EXTRACT / 5/2/16		Analyst: STP
pH	9.4			s.u.	1	5/2/2016 04:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB02
Collection Date: 4/26/2016 01:15 PM

Work Order: 16041608
Lab ID: 16041608-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 5/2/16	Analyst: IT
DRO (C10-C28)	ND		4.4	mg/Kg-dry	1	5/3/2016 12:45 PM
Surr: 4-Terphenyl-d14	80.3		39-133	%REC	1	5/3/2016 12:45 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/29/16	Analyst: IT
GRO (C6-C10)	ND		2.9	mg/Kg-dry	1	5/2/2016 06:15 PM
Surr: Toluene-d8	100		50-150	%REC	1	5/2/2016 06:15 PM
MERCURY BY CVAA						
			SW7471B		Prep: SW7471 / 5/5/16	Analyst: LR
Mercury	0.014		0.013	mg/Kg-dry	1	5/6/2016 01:42 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 5/2/16	Analyst: JEC
Arsenic	5.1		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Barium	58		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Cadmium	ND		0.80	mg/Kg-dry	1	5/2/2016 09:09 PM
Chromium	9.0		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Copper	11		0.80	mg/Kg-dry	1	5/2/2016 09:09 PM
Lead	9.2		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Nickel	12		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Selenium	ND		0.80	mg/Kg-dry	1	5/2/2016 09:09 PM
Silver	ND		0.40	mg/Kg-dry	1	5/2/2016 09:09 PM
Zinc	50		0.80	mg/Kg-dry	1	5/2/2016 09:09 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Calcium	50		5.0	mg/L	10	5/4/2016 03:13 AM
Magnesium	15		2.0	mg/L	10	5/4/2016 03:13 AM
Sodium	190		2.0	mg/L	10	5/4/2016 12:42 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Sodium Adsorption Ratio	6.0		0.010	none	1	5/4/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 5/2/16	Analyst: RM
Acenaphthene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Anthracene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Benzo(a)anthracene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Benzo(a)pyrene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Benzo(b)fluoranthene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Benzo(k)fluoranthene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Chrysene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Dibenzo(a,h)anthracene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Fluoranthene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB02
Collection Date: 4/26/2016 01:15 PM

Work Order: 16041608
Lab ID: 16041608-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Indeno(1,2,3-cd)pyrene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Naphthalene	ND		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Pyrene	0.011		0.0070	mg/Kg-dry	1	5/3/2016 02:14 AM
Surr: 2-Fluorobiphenyl	81.9		12-100	%REC	1	5/3/2016 02:14 AM
Surr: 4-Terphenyl-d14	80.4		25-137	%REC	1	5/3/2016 02:14 AM
Surr: Nitrobenzene-d5	89.4		37-107	%REC	1	5/3/2016 02:14 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/29/16	Analyst: LSY	
Benzene	ND		0.035	mg/Kg-dry	1	5/1/2016 08:22 AM
Ethylbenzene	ND		0.035	mg/Kg-dry	1	5/1/2016 08:22 AM
m,p-Xylene	ND		0.070	mg/Kg-dry	1	5/1/2016 08:22 AM
o-Xylene	ND		0.035	mg/Kg-dry	1	5/1/2016 08:22 AM
Toluene	ND		0.035	mg/Kg-dry	1	5/1/2016 08:22 AM
Xylenes, Total	ND		0.11	mg/Kg-dry	1	5/1/2016 08:22 AM
Surr: 1,2-Dichloroethane-d4	101		70-130	%REC	1	5/1/2016 08:22 AM
Surr: 4-Bromofluorobenzene	97.2		70-130	%REC	1	5/1/2016 08:22 AM
Surr: Dibromofluoromethane	92.0		70-130	%REC	1	5/1/2016 08:22 AM
Surr: Toluene-d8	98.4		70-130	%REC	1	5/1/2016 08:22 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 5/3/16	Analyst: JB	
Electrical Conductivity @ Saturation	1.5		0.050	mmhos/cm @2	10	5/4/2016 09:30 AM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: JB		
Chromium, Trivalent	9.0		0.54	mg/Kg-dry	1	5/5/2016 08:00 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 5/3/16	Analyst: MB	
Chromium, Hexavalent	ND		1.1	mg/Kg-dry	1	5/4/2016 04:00 PM
MOISTURE			SW3550C	Analyst: LW		
Moisture	7.7		0.050	% of sample	1	4/29/2016 06:30 PM
PH			SW9045D	Prep: EXTRACT / 5/2/16	Analyst: STP	
pH	8.5			s.u.	1	5/2/2016 04:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB03
Collection Date: 4/26/2016 01:20 PM

Work Order: 16041608
Lab ID: 16041608-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 5/2/16	Analyst: IT
DRO (C10-C28)	ND		4.4	mg/Kg-dry	1	5/3/2016 01:15 AM
Surr: 4-Terphenyl-d14	81.7		39-133	%REC	1	5/3/2016 01:15 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/29/16	Analyst: IT
GRO (C6-C10)	ND		2.9	mg/Kg-dry	1	5/2/2016 06:40 PM
Surr: Toluene-d8	102		50-150	%REC	1	5/2/2016 06:40 PM
MERCURY BY CVAA						
			SW7471B		Prep: SW7471 / 5/5/16	Analyst: LR
Mercury	0.034		0.015	mg/Kg-dry	1	5/6/2016 01:44 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 5/2/16	Analyst: JEC
Arsenic	6.6		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Barium	120		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Cadmium	ND		0.79	mg/Kg-dry	1	5/2/2016 09:15 PM
Chromium	9.9		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Copper	11		0.79	mg/Kg-dry	1	5/2/2016 09:15 PM
Lead	11		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Nickel	13		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Selenium	ND		0.79	mg/Kg-dry	1	5/3/2016 04:19 PM
Silver	ND		0.40	mg/Kg-dry	1	5/2/2016 09:15 PM
Zinc	54		0.79	mg/Kg-dry	1	5/2/2016 09:15 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Calcium	28		5.0	mg/L	10	5/4/2016 03:18 AM
Magnesium	9.0		2.0	mg/L	10	5/4/2016 03:18 AM
Sodium	100		2.0	mg/L	10	5/4/2016 12:48 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 5/3/16	Analyst: JEC
Sodium Adsorption Ratio	4.2		0.010	none	1	5/4/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 5/2/16	Analyst: RM
Acenaphthene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Anthracene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Benzo(a)anthracene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Benzo(a)pyrene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Benzo(b)fluoranthene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Benzo(k)fluoranthene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Chrysene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Dibenzo(a,h)anthracene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Fluoranthene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-16

Client: LT Environmental, Inc
Project: MDP #6 (59416007)
Sample ID: PB03
Collection Date: 4/26/2016 01:20 PM

Work Order: 16041608
Lab ID: 16041608-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Indeno(1,2,3-cd)pyrene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Naphthalene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Pyrene	ND		0.0071	mg/Kg-dry	1	5/3/2016 02:34 AM
Surr: 2-Fluorobiphenyl	71.8		12-100	%REC	1	5/3/2016 02:34 AM
Surr: 4-Terphenyl-d14	83.7		25-137	%REC	1	5/3/2016 02:34 AM
Surr: Nitrobenzene-d5	82.3		37-107	%REC	1	5/3/2016 02:34 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/29/16		Analyst: LSY
Benzene	ND		0.034	mg/Kg-dry	1	5/1/2016 08:47 AM
Ethylbenzene	ND		0.034	mg/Kg-dry	1	5/1/2016 08:47 AM
m,p-Xylene	ND		0.069	mg/Kg-dry	1	5/1/2016 08:47 AM
o-Xylene	ND		0.034	mg/Kg-dry	1	5/1/2016 08:47 AM
Toluene	ND		0.034	mg/Kg-dry	1	5/1/2016 08:47 AM
Xylenes, Total	ND		0.10	mg/Kg-dry	1	5/1/2016 08:47 AM
Surr: 1,2-Dichloroethane-d4	104		70-130	%REC	1	5/1/2016 08:47 AM
Surr: 4-Bromofluorobenzene	95.6		70-130	%REC	1	5/1/2016 08:47 AM
Surr: Dibromofluoromethane	91.4		70-130	%REC	1	5/1/2016 08:47 AM
Surr: Toluene-d8	97.4		70-130	%REC	1	5/1/2016 08:47 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 5/3/16		Analyst: JB
Electrical Conductivity @ Saturation	0.74		0.050	mmhos/cm @2	10	5/4/2016 09:30 AM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JB
Chromium, Trivalent	9.9		0.54	mg/Kg-dry	1	5/5/2016 08:00 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 5/3/16		Analyst: MB
Chromium, Hexavalent	ND		1.1	mg/Kg-dry	1	5/4/2016 04:00 PM
MOISTURE			SW3550C			Analyst: LW
Moisture	6.8		0.050	% of sample	1	4/29/2016 06:30 PM
PH			SW9045D	Prep: EXTRACT / 5/2/16		Analyst: STP
pH	8.7			s.u.	1	5/2/2016 04:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-16

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85471** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-85471-85471				Units: mg/Kg		Analysis Date: 5/2/2016 05:45 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806100		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	1.566	0	2	0	78.3	39-133		0		

LCS		Sample ID: DLCSS1-85471-85471				Units: mg/Kg		Analysis Date: 5/2/2016 06:15 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806101		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	163.8	5.0	200	0	81.9	61-109		0		
Surr: 4-Terphenyl-d14	1.54	0	2	0	77	39-133		0		

MS		Sample ID: 16041442-01A MS				Units: mg/Kg		Analysis Date: 5/2/2016 06:45 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806102		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	144.7	4.1	165.6	8.485	82.3	48-110		0		
Surr: 4-Terphenyl-d14	1.679	0	1.656	0	101	39-133		0		

MSD		Sample ID: 16041442-01A MSD				Units: mg/Kg		Analysis Date: 5/2/2016 07:15 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806103		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	144.4	4.1	163.4	8.485	83.2	48-110	144.7	0.167	30	
Surr: 4-Terphenyl-d14	1.518	0	1.634	0	92.9	39-133	1.679	10.1	30	

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
 Work Order: 16041608
 Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85408** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-85408-85408				Units: µg/Kg-dry		Analysis Date: 5/2/2016 11:20 AM		
Client ID:		Run ID: GC9_160502A				SeqNo: 3805236		Prep Date: 4/29/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	4618	0	5000	0	92.4	50-150	0			

LCS		Sample ID: LCS-85408-85408				Units: µg/Kg-dry		Analysis Date: 5/2/2016 10:55 AM		
Client ID:		Run ID: GC9_160502A				SeqNo: 3805235		Prep Date: 4/29/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	482300	2,500	500000	0	96.5	70-130	0			
Surr: Toluene-d8	4782	0	5000	0	95.6	50-150	0			

MS		Sample ID: 16041606-02A MS				Units: µg/Kg-dry		Analysis Date: 5/2/2016 02:58 PM		
Client ID:		Run ID: GC9_160502A				SeqNo: 3805244		Prep Date: 4/29/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	673900	3,500	690500	0	97.6	70-130	0			
Surr: Toluene-d8	6822	0	6905	0	98.8	50-150	0			

MSD		Sample ID: 16041606-02A MSD				Units: µg/Kg-dry		Analysis Date: 5/2/2016 03:47 PM		
Client ID:		Run ID: GC9_160502A				SeqNo: 3805245		Prep Date: 4/29/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	658900	3,500	690500	0	95.4	70-130	673900	2.25	30	
Surr: Toluene-d8	6538	0	6905	0	94.7	50-150	6822	4.25	30	

The following samples were analyzed in this batch:

16041608-01A	16041608-02A	16041608-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85702** Instrument ID **HG1** Method: **SW7471B**

MBLK		Sample ID: MBLK-85702-85702				Units: mg/Kg		Analysis Date: 5/6/2016 01:28 PM		
Client ID:		Run ID: HG1_160506A				SeqNo: 3815268		Prep Date: 5/5/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

LCS		Sample ID: LCS-85702-85702				Units: mg/Kg		Analysis Date: 5/6/2016 01:30 PM		
Client ID:		Run ID: HG1_160506A				SeqNo: 3815269		Prep Date: 5/5/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1775 0.020 0.1665 0 107 80-120 0

MS		Sample ID: 16041635-07BMS				Units: mg/Kg		Analysis Date: 5/6/2016 01:55 PM		
Client ID:		Run ID: HG1_160506A				SeqNo: 3815277		Prep Date: 5/5/2016		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.487 0.068 0.1125 0.3309 139 75-125 0 S

MSD		Sample ID: 16041635-07BMSD				Units: mg/Kg		Analysis Date: 5/6/2016 01:58 PM		
Client ID:		Run ID: HG1_160506A				SeqNo: 3815278		Prep Date: 5/5/2016		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.4345 0.068 0.1128 0.3309 91.9 75-125 0.487 11.4 35

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85415** Instrument ID **ICP2** Method: **SW846 6010C**

DUP				Sample ID: 16041581-01ADUP				Units: mg/L			Analysis Date: 5/4/2016 03:52 AM		
Client ID:			Run ID: ICP2_160503B				SeqNo: 3809461		Prep Date: 5/3/2016		DF: 10		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Calcium	185.7	5.0	0	0	0	0-0	186.7	0.534					
Magnesium	16.94	2.0	0	0	0	0-0	17.19	1.45					
Sodium	236.2	2.0	0	0	0	0-0	236.1	0.0391					

DUP				Sample ID: 16041581-01ADUP				Units: none			Analysis Date: 5/4/2016			
Client ID:				Run ID: SAR_160504A				SeqNo: 3810543			Prep Date: 5/3/2016		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Sodium Adsorption Ratio		4.449	0.010	0	0	0		4.433	0.366	50				

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85462** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: MBLK-85462-85462				Units: mg/Kg		Analysis Date: 5/2/2016 07:51 PM		
Client ID:		Run ID: ICP2_160502A				SeqNo: 3806444		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	0.0796	0.50								J
Chromium	ND	0.25								
Copper	ND	0.50								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								
Zinc	0.07734	0.50								J

LCS		Sample ID: LCS-85462-85462				Units: mg/Kg		Analysis Date: 5/2/2016 07:56 PM		
Client ID:		Run ID: ICP2_160502A				SeqNo: 3806445		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.669	0.25	5	0	93.4	80-120	0			
Barium	4.521	0.25	5	0	90.4	80-120	0			
Cadmium	4.662	0.50	5	0	93.2	80-120	0			
Chromium	4.557	0.25	5	0	91.1	80-120	0			
Copper	4.643	0.50	5	0	92.9	80-120	0			
Lead	4.494	0.25	5	0	89.9	80-120	0			
Nickel	4.657	0.25	5	0	93.1	80-120	0			
Selenium	4.63	0.50	5	0	92.6	80-120	0			
Silver	4.518	0.25	5	0	90.4	80-120	0			
Zinc	4.673	0.50	5	0	93.5	80-120	0			

MS		Sample ID: 16041608-03BMS				Units: mg/Kg		Analysis Date: 5/2/2016 09:20 PM		
Client ID: PB03		Run ID: ICP2_160502A				SeqNo: 3806461		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	24.61	0.37	7.375	6.143	250	75-125	0			S
Barium	137.3	0.37	7.375	116.3	286	75-125	0			SO
Cadmium	7.082	0.74	7.375	0.1945	93.4	75-125	0			
Chromium	17.22	0.37	7.375	9.274	108	75-125	0			
Copper	17.64	0.74	7.375	10.45	97.5	75-125	0			
Lead	17.47	0.37	7.375	10.29	97.4	75-125	0			
Nickel	16.91	0.37	7.375	12.19	64.1	75-125	0			S
Selenium	7.747	0.74	7.375	0.8122	94	75-125	0			
Silver	6.627	0.37	7.375	-0.09342	91.1	75-125	0			
Zinc	55.7	0.74	7.375	50.19	74.6	75-125	0			SO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85462** Instrument ID **ICP2** Method: **SW846 6010C**

MSD		Sample ID: 16041608-03BMSD				Units: mg/Kg		Analysis Date: 5/2/2016 09:26 PM		
Client ID: PB03		Run ID: ICP2_160502A				SeqNo: 3806462		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.76	0.37	7.364	6.143	103	75-125	24.61	56.5	20	R
Barium	136.9	0.37	7.364	116.3	281	75-125	137.3	0.281	20	SO
Cadmium	6.964	0.74	7.364	0.1945	91.9	75-125	7.082	1.67	20	
Chromium	17.91	0.37	7.364	9.274	117	75-125	17.22	3.92	20	
Copper	16.93	0.74	7.364	10.45	88	75-125	17.64	4.1	20	
Lead	16.02	0.37	7.364	10.29	77.8	75-125	17.47	8.67	20	
Nickel	18.71	0.37	7.364	12.19	88.6	75-125	16.91	10.1	20	
Selenium	7.858	0.74	7.364	0.8122	95.7	75-125	7.747	1.42	20	
Silver	6.689	0.37	7.364	-0.09342	92.1	75-125	6.627	0.939	20	
Zinc	58.99	0.74	7.364	50.19	119	75-125	55.7	5.74	20	O

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
 Work Order: 16041608
 Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85435** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-85435-85435				Units: µg/Kg		Analysis Date: 5/2/2016 06:21 PM		
Client ID:		Run ID: SVMS8_160502A				SeqNo: 3806051		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
Surr: 2-Fluorobiphenyl	811.7	0	1667	0	48.7	12-100	0			
Surr: 4-Terphenyl-d14	1698	0	1667	0	102	25-137	0			
Surr: Nitrobenzene-d5	932.7	0	1667	0	56	37-107	0			

LCS		Sample ID: SLCSS1-85435-85435				Units: µg/Kg		Analysis Date: 5/2/2016 06:42 PM		
Client ID:		Run ID: SVMS8_160502A				SeqNo: 3806052		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	533.7	6.7	666.7	0	80	45-110	0			
Anthracene	696.7	6.7	666.7	0	104	55-105	0			
Benzo(a)anthracene	672.7	6.7	666.7	0	101	50-110	0			
Benzo(a)pyrene	709.7	6.7	666.7	0	106	50-110	0			
Benzo(b)fluoranthene	689.7	6.7	666.7	0	103	45-115	0			
Benzo(k)fluoranthene	718	6.7	666.7	0	108	45-115	0			
Chrysene	663.3	6.7	666.7	0	99.5	55-110	0			
Dibenzo(a,h)anthracene	684.3	6.7	666.7	0	103	40-125	0			
Fluoranthene	710.7	6.7	666.7	0	107	55-115	0			
Fluorene	583.7	6.7	666.7	0	87.5	50-110	0			
Indeno(1,2,3-cd)pyrene	753.3	6.7	666.7	0	113	40-120	0			
Naphthalene	528	6.7	666.7	0	79.2	40-105	0			
Pyrene	723.3	6.7	666.7	0	108	45-125	0			
Surr: 2-Fluorobiphenyl	1280	0	1667	0	76.8	12-100	0			
Surr: 4-Terphenyl-d14	1738	0	1667	0	104	25-137	0			
Surr: Nitrobenzene-d5	1409	0	1667	0	84.5	37-107	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
 Work Order: 16041608
 Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85435** Instrument ID **SVMS8** Method: **SW846 8270D**

MS				Sample ID: 16041582-02B MS			Units: µg/Kg		Analysis Date: 5/2/2016 07:31 PM	
Client ID:		Run ID: SVMS8_160502A			SeqNo: 3806053		Prep Date: 5/2/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	489.2	6.6	661.6	0	73.9	45-110	0			
Anthracene	613.9	6.6	661.6	0	92.8	55-105	0			
Benzo(a)anthracene	628.1	6.6	661.6	0	94.9	50-110	0			
Benzo(a)pyrene	657.9	6.6	661.6	0	99.4	50-110	0			
Benzo(b)fluoranthene	636.4	6.6	661.6	0	96.2	45-115	0			
Benzo(k)fluoranthene	612.2	6.6	661.6	0	92.5	45-115	0			
Chrysene	609.6	6.6	661.6	0	92.1	55-110	0			
Dibenzo(a,h)anthracene	591.7	6.6	661.6	0	89.4	40-125	0			
Fluoranthene	672.1	6.6	661.6	0	102	55-115	0			
Fluorene	521.9	6.6	661.6	0	78.9	50-110	0			
Indeno(1,2,3-cd)pyrene	648.6	6.6	661.6	0	98	40-120	0			
Naphthalene	518.6	6.6	661.6	0	78.4	40-105	0			
Pyrene	677.7	6.6	661.6	0	102	45-125	0			
Surr: 2-Fluorobiphenyl	1244	0	1654	0	75.2	12-100	0			
Surr: 4-Terphenyl-d14	1602	0	1654	0	96.9	25-137	0			
Surr: Nitrobenzene-d5	1253	0	1654	0	75.8	37-107	0			

MSD				Sample ID: 16041582-02B MSD			Units: µg/Kg		Analysis Date: 5/2/2016 07:51 PM	
Client ID:		Run ID: SVMS8_160502A			SeqNo: 3806054		Prep Date: 5/2/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	504	6.6	660.1	0	76.3	45-110	489.2	2.98	30	
Anthracene	645.2	6.6	660.1	0	97.7	55-105	613.9	4.98	30	
Benzo(a)anthracene	638.6	6.6	660.1	0	96.7	50-110	628.1	1.66	30	
Benzo(a)pyrene	677.9	6.6	660.1	0	103	50-110	657.9	3	30	
Benzo(b)fluoranthene	642.9	6.6	660.1	0	97.4	45-115	636.4	1.02	30	
Benzo(k)fluoranthene	641.6	6.6	660.1	0	97.2	45-115	612.2	4.68	30	
Chrysene	620.2	6.6	660.1	0	93.9	55-110	609.6	1.72	30	
Dibenzo(a,h)anthracene	646.9	6.6	660.1	0	98	40-125	591.7	8.9	30	
Fluoranthene	705.6	6.6	660.1	0	107	55-115	672.1	4.87	30	
Fluorene	556.8	6.6	660.1	0	84.3	50-110	521.9	6.46	30	
Indeno(1,2,3-cd)pyrene	718.2	6.6	660.1	0	109	40-120	648.6	10.2	30	
Naphthalene	455.8	6.6	660.1	0	69	40-105	518.6	12.9	30	
Pyrene	694.1	6.6	660.1	0	105	45-125	677.7	2.38	30	
Surr: 2-Fluorobiphenyl	1145	0	1650	0	69.4	12-100	1244	8.29	40	
Surr: 4-Terphenyl-d14	1639	0	1650	0	99.3	25-137	1602	2.29	40	
Surr: Nitrobenzene-d5	1194	0	1650	0	72.3	37-107	1253	4.86	40	

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
 Work Order: 16041608
 Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85407** Instrument ID **VMS9** Method: **SW8260B**

MBLK				Sample ID: MBLK-85407-85407			Units: µg/Kg-dry		Analysis Date: 4/30/2016 01:33 PM		
Client ID:			Run ID: VMS9_160430A			SeqNo: 3804023		Prep Date: 4/29/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	ND	30									
Ethylbenzene	ND	30									
m,p-Xylene	ND	60									
o-Xylene	ND	30									
Toluene	ND	30									
Xylenes, Total	ND	90									
Surr: 1,2-Dichloroethane-d4	1030	0	1000	0	103	70-130		0			
Surr: 4-Bromofluorobenzene	966	0	1000	0	96.6	70-130		0			
Surr: Dibromofluoromethane	987	0	1000	0	98.7	70-130		0			
Surr: Toluene-d8	955.5	0	1000	0	95.6	70-130		0			

LCS				Sample ID: LCS-85407-85407			Units: µg/Kg-dry		Analysis Date: 4/30/2016 11:55 AM		
Client ID:			Run ID: VMS9_160430A			SeqNo: 3804022		Prep Date: 4/29/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1018	30	1000	0	102	75-125	0				
Ethylbenzene	1068	30	1000	0	107	75-125	0				
m,p-Xylene	2208	60	2000	0	110	80-125	0				
o-Xylene	1077	30	1000	0	108	75-125	0				
Toluene	1059	30	1000	0	106	70-125	0				
Xylenes, Total	3284	90	3000	0	109	75-125	0				
Surr: 1,2-Dichloroethane-d4	981	0	1000	0	98.1	70-130	0				
Surr: 4-Bromofluorobenzene	1029	0	1000	0	103	70-130	0				
Surr: Dibromofluoromethane	1004	0	1000	0	100	70-130	0				
Surr: Toluene-d8	1018	0	1000	0	102	70-130	0				

MS				Sample ID: 16041606-02A MS				Units: µg/Kg-dry		Analysis Date: 5/1/2016 10:01 AM	
Client ID:			Run ID: VMS9_160430B			SeqNo: 3804520		Prep Date: 4/29/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1414	41	1381	0	102	75-125	0				
Ethylbenzene	1438	41	1381	0	104	75-125	0				
m,p-Xylene	2950	83	2762	0	107	80-125	0				
o-Xylene	1467	41	1381	0	106	75-125	0				
Toluene	1420	41	1381	0	103	70-125	0				
Xylenes, Total	4417	120	4143	0	107	75-125	0				
Surr: 1,2-Dichloroethane-d4	1387	0	1381	0	100	70-130	0				
Surr: 4-Bromofluorobenzene	1525	0	1381	0	110	70-130	0				
Surr: Dibromofluoromethane	1288	0	1381	0	93.3	70-130	0				
Surr: Toluene-d8	1389	0	1381	0	101	70-130	0				

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85407** Instrument ID **VMS9** Method: **SW8260B**

MSD				Sample ID: 16041606-02A MSD			Units: µg/Kg-dry		Analysis Date: 5/1/2016 10:25 AM	
Client ID:		Run ID: VMS9_160430B			SeqNo: 3804522		Prep Date: 4/29/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1435	41	1381	0	104	75-125	1414	1.45	30	
Ethylbenzene	1426	41	1381	0	103	75-125	1438	0.868	30	
m,p-Xylene	2933	83	2762	0	106	80-125	2950	0.587	30	
o-Xylene	1482	41	1381	0	107	75-125	1467	1.03	30	
Toluene	1387	41	1381	0	100	70-125	1420	2.31	30	
Xylenes, Total	4415	120	4143	0	107	75-125	4417	0.0469	30	
Surr: 1,2-Dichloroethane-d4	1355	0	1381	0	98.1	70-130	1387	2.37	30	
Surr: 4-Bromofluorobenzene	1489	0	1381	0	108	70-130	1525	2.38	30	
Surr: Dibromofluoromethane	1299	0	1381	0	94.1	70-130	1288	0.854	30	
Surr: Toluene-d8	1372	0	1381	0	99.4	70-130	1389	1.25	30	

The following samples were analyzed in this batch:

16041608-01A	16041608-02A	16041608-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85415** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 16041581-01A DUP				Units: mmhos/cm @25°		Analysis Date: 5/4/2016 09:30 AM		
Client ID:		Run ID: WETCHEM_160504C				SeqNo: 3808954		Prep Date: 5/3/2016		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	2.32	0.050	0	0	0		2.29	1.3	50	

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85485** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-85485-85485				Units: s.u.		Analysis Date: 5/2/2016 04:30 PM		
Client ID:		Run ID: WETCHEM_160502L				SeqNo: 3805295		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH	3.99	0	4	0	99.8	90-110	0			
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DUP		Sample ID: 16041606-05B DUP				Units: s.u.		Analysis Date: 5/2/2016 04:30 PM		
Client ID:		Run ID: WETCHEM_160502L				SeqNo: 3805303		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH	8.67	0	0	0	0	0-0	8.73	0.69	20	
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DUP		Sample ID: 16041608-03B DUP				Units: s.u.		Analysis Date: 5/2/2016 04:30 PM		
Client ID: PB03		Run ID: WETCHEM_160502L				SeqNo: 3805309		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH	8.73	0	0	0	0	0-0	8.66	0.805	20	
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The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **85608** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-85608-85608				Units: mg/Kg		Analysis Date: 5/4/2016 04:00 PM		
Client ID:		Run ID: WETCHEM_160504S		SeqNo: 3810952		Prep Date: 5/3/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.98

LCS		Sample ID: LCS-85608-85608				Units: mg/Kg		Analysis Date: 5/4/2016 04:00 PM		
Client ID:		Run ID: WETCHEM_160504S		SeqNo: 3810951		Prep Date: 5/3/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.465 0.99 4.95 0 90.2 80-120 0

MS		Sample ID: 16041608-03B MS				Units: mg/Kg		Analysis Date: 5/4/2016 04:00 PM		
Client ID: PB03		Run ID: WETCHEM_160504S		SeqNo: 3810945		Prep Date: 5/3/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.667 0.98 4.902 0.2451 90.2 75-125 0

MS		Sample ID: 16041608-03B MSI				Units: mg/Kg		Analysis Date: 5/4/2016 04:00 PM		
Client ID: PB03		Run ID: WETCHEM_160504S		SeqNo: 3810947		Prep Date: 5/3/2016		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2970 99 3027 0.2451 98.1 75-125 0

MSD		Sample ID: 16041608-03B MSD				Units: mg/Kg		Analysis Date: 5/4/2016 04:00 PM		
Client ID: PB03		Run ID: WETCHEM_160504S		SeqNo: 3810946		Prep Date: 5/3/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.594 0.99 4.95 0.2451 87.8 75-125 4.667 1.57 20

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc
Work Order: 16041608
Project: MDP #6 (59416007)

QC BATCH REPORT

Batch ID: **R186511** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R186511				Units: % of sample		Analysis Date: 4/29/2016 06:30 PM		
Client ID:		Run ID: MOIST_160429B				SeqNo: 3803548		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS		Sample ID: LCS-R186511				Units: % of sample		Analysis Date: 4/29/2016 06:30 PM		
Client ID:		Run ID: MOIST_160429B				SeqNo: 3803547		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: 16041580-01A DUP				Units: % of sample		Analysis Date: 4/29/2016 06:30 PM		
Client ID:		Run ID: MOIST_160429B				SeqNo: 3803526		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 15.12 0.050 0 0 0 14.89 1.53 20

DUP		Sample ID: 16041618-01B DUP				Units: % of sample		Analysis Date: 4/29/2016 06:30 PM		
Client ID:		Run ID: MOIST_160429B				SeqNo: 3803542		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.98 0.050 0 0 0 14.87 0.737 20

The following samples were analyzed in this batch:

16041608-01B	16041608-02B	16041608-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.



☐ ALS Environmental
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 1

☒ ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

Customer Information		Project Information					Parameter/Method Request for Analysis													
Purchase Order		Project Name	MDP #6					A	TPH GRO/DRO											
Work Order		Project Number	59416007					B	BTEX											
Company Name	LT Environmental	Bill To Company	LT Environmental					C	Table 910 PAHs											
Sand Report To	Chris McKisson	Invoice Attn	ap@ltenv.com					D	Table 910 Metals											
Address	820 Megan Ave. Unit B	Address	820 Megan Ave. Unit B					E	EC											
City/State/Zip	Rifle, CO 81637	City/State/Zip	Rifle, CO 81637					F	SAR											
Phone	(970) 285-9985	Phone	(970) 285-9985					G	pH											
Fax		Fax						H	Total Arsenic 6020											
e-Mail Address: cmckisson@ltenv.com, rfishburn@ltenv.com								I												
								J												
No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold			
1	PB01	4/26/2016	13:10	Soil	none	3	x	x	x	x	x	x	x	x						
2	PB02	4/26/2016	13:15	Soil	none	3	x	x	x	x	x	x	x	x						
3	PB03	4/26/2016	13:20	Soil	none	3	x	x	x	x	x	x	x	x						
4																				
5																				
6																				
7																				
8																				
9																				
10																				
Sampler(s): Please Print & Sign		Shipment Method:		Required Turnaround Time: (Check Box)				Other				Results Due Date:								
Steve Scivigliano / Steve Scivigliano				<input type="checkbox"/> 10 Wk Days <input checked="" type="checkbox"/> 15 Wk Days <input type="checkbox"/> 3 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour																
Relinquished by:		Date:	Time:	Received by:		Date:	Time:	Notes:												
Steve Scivigliano		4/26/16	15:08	[Signature]		4/26/16	1508	5 day standard TAT per Bruce S.												
Relinquished by:		Date:	Time:	Received by (Laboratory):		Date:	Time:	ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)										
[Signature]		4/26/16	1600	[Signature]		4/29/16	0930		110C	<input type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Raw Data										
Logged by (Laboratory):		Date:	Time:	Checked by (Laboratory):						<input type="checkbox"/> TRRP LRC <input type="checkbox"/> TRRP Level IV										
Kev		4/28/16	1450	[Signature]						<input type="checkbox"/> Level IV: SW846 Methods/CLP like										
										<input type="checkbox"/> Other:										
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C																				

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

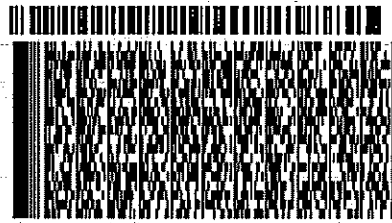
ORIGIN ID: RILA (818) 298-1033
 NICK MARTINEZ
 ALS ENVIRONMENTAL PARACHUTE
 PARACHUTE SERVICE CENTER
 127 EAST 1ST ST
 PARACHUTE, CO 81635
 UNITED STATES US

SHIP DATE: 28APR16
 ACTWGT: 55.00 LB
 CAD: 2264840/NET3730
 DIMS: 24x15x15 IN
 BILL SENDER

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

HOLLAND MI 49424

(818) 399-8070 REF: 042616-1
 NV
 PO: PARACHUTE DEPT:

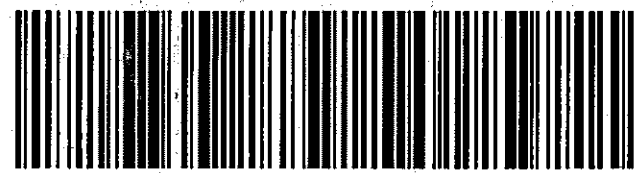


REL#
 3785346

2 of 3
 WED - 27 APR 10:30A
 PRIORITY OVERNIGHT
 MP6# 7762 0106 7705
 Mstr# 7762 0106 7083 0201

XX HLMA

49424
 MI-US **GRR**



540JH1042727F

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number. Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Sample Receipt Checklist

Client Name: **LTENV**

Date/Time Received: **28-Apr-16 09:30**

Work Order: **16041608**

Received by: **KRW**

Checklist completed by Keith Wurenga
eSignature

28-Apr-16
Date

Reviewed by: Chad Whelton
eSignature

29-Apr-16
Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>1.0/1.0 C</u> <u>SR2</u>		
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>4/28/2016 3:02:23 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: