



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 18, 2017

Attn: Lori Frauli Trulson City of Dallas, Office of Environmental Quality 1500 Marilla Street #7AN Dallas, TX 75201

Subject: Soil, Sediment, and Surface Water Sample Results - Lane Plating Works, Inc. (TCEQ ID: 4152-4744, EPA ID: TXN000605240/TXD007336571, RN100597707), 5322 Bonnie View Road, Dallas, Dallas County, Texas

Dear Ms. Trulson:

The Texas Commission on Environmental Quality (TCEQ) collected one soil (SO-02), nine sediment and two sediment duplicate (SE-02 and SE-06 through SE-15), and seven surface water and two surface water duplicate samples (SW-06 through SW-09 and SW-11 through SW-15) on July 18-21, 2016, as part of an Environmental Protection Agency-funded Site Inspection of the Lane Plating Works, Inc. site (site) in Dallas, Texas. Samples were collected from your properties located off of Pentagon Parkway, Bonnie View Road, and within the Joppa Preserve/Lemmon Lake Park. Soil and sediment samples were collected at depths ranging from 0-6 or 6-12 inches below ground surface and surface water samples were collected from the surface of the streams and Trinity River. All samples were analyzed for total metals, mercury, and cyanide (the chemicals of concern).

Your soil sample results were compared to the TCEQ Texas Risk Reduction Program (TRRP) health-based protective concentration levels (PCLs), which represent safe levels for each chemical in soil assuming daily, long-term residential exposure. Other results were compared to the TCEQ TRRP PCLs for sediment and surface water, which represent safe levels for each chemical for incidental ingestion and dermal contact (contact recreation). Your surface water sample results were additionally compared to the TCEQ TRRP human health risk-based exposure levels (RBELs), which represent safe levels for each chemical in surface water for a fishery. Results were compared to RBELs for either an incidental or sustainable fishery dependent on the stream order and use, as discussed in the TCEQ Regulatory Guidance RG-366/TRRP-24 "Determining PCLs for Surface Water and Sediment" dated December 2007 (pp. 23-24, 26-28, and 30). Stream order is a classification of stream size. Although most of your samples were collected along first or second order streams and results were compared to the RBELs for an incidental fishery, sample SW-13 was collected from the Trinity River, a third order stream, and associated results were compared to sustainable fishery RBELs.

Manganese was detected above the TRRP RBEL for a sustainable fishery but below the TRRP contact recreation PCL in the surface water sample collected from the intersection of the stream that flows through the Joppa Preserve with the Trinity River, as shown in the table below. All other chemicals were reported as not detected or were detected below the respective TRRP PCLs or RBELs in surface water. No chemicals of concern were detected at concentrations above the respective TRRP PCLs from the soil or sediment samples collected on your properties.

Sample ID	Date	Chemical	RBEL - Sustainable Fishery (micrograms /liter)	PCL - Contact Recreation (micrograms/ liter)	Result (micrograms/ liter)
SW-13	7/18/16	Manganese	100	40,900	144 J

J – Result was qualified as an estimated concentration during the data review because of field duplicate quality control parameters

The TCEQ understands that the Joppa Preserve/Lemmon Lake Park is a popular fishing location. It is important to note that no surface water or sediment samples were collected from the ponds inside the park, and the manganese exceedance of the sustainable fishery TRRP RBEL occurred in a sample from the Trinity River at a location away from the main park area. The TCEQ understands that the segment of Trinity River located adjacent to the Joppa Preserve/Lemmon Lake Park (Segment 0805) is an impaired water body based on dioxins and polychlorinated biphenyls, and that there have been fish consumption advisories implemented by the Texas Department of State Health Services in this area.

The analytical results are enclosed with this letter. The Site Inspection report has been drafted and is pending final approval. The report will be made available to you once it is final. If you would like additional information about these sample results, please call me at 512-239-2466, or email me at <a href="mailto:rebecca.storms@tceq.texas.gov">rebecca.storms@tceq.texas.gov</a>. Specific questions related to toxicological effects of contaminants may be directed to Joseph Haney, Toxicologist, at 512-239-5691.

Sincerely,

Rebecca Storms, P.G., Project Manager

Superfund Section Remediation Division

Texas Commission on Environmental Quality

RS/dl

Enclosure: Laboratory Data Report

Cc: Brett Johnson, Parks and Recreation Department, Park Maintenance Services Division, 542 East Jefferson Boulevard, Dallas, TX 75203

Rebecca Stowns

# SOTED STATES TO SENSE OF STATES

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### Region 6 Laboratory

Environmental Services Branch 10625 Fallstone Road, Houston, TX 77099 Phone: (281)983-2100 Fax: (281)983-2248

#### **Final Analytical Report**

Site Name	Lane Plating
Sample Collection Date(s)	07/18/16 - 07/21/16
Contact	Bret Kendrick (6SF-RL)
Report Date	09/12/16
Project #	16SF093
Work Order(s)	1607003
	1607007
	1607008
	1607010

#### Analyses included in this report:

Metals ICP CLP Metals Mercury CLP (E) Metals ICP/MS CLP

#### Report Narrative

**Metals ICP-MS:** 

#### Batch B6G2513:

BLK1: Blank results for lead exceed the RL; the source results for samples 1607003-01,-02, -03, -05, and -06 are qualified and may be blank affected.

#### Batch B6G2611:

BLK1/BLK2: Blank results for lead exceed the RL; the source results for samples 1607007-06, -07, and -08 are qualified and may be blank affected.

MS1/MSD1 (Source Sample 1607003-01): Antimony spike recovery is outside the acceptance limits; the source result is qualified and is an estimate.

MS2 (Sample 1607007-02): Antimony and lead spike recoveries are outside the acceptance limits; the source results are qualified and are an estimate.

MS3/MSD3 (Sample 16007008-07): Antimony and selenium recoveries are outside the acceptance limits; the source results are qualified and are estimates. Lead spike recovery is

#### Report Narrative (cont'd)

outside the acceptance limits. The source results are four or more time the spike added, therefore cannot be reliably calculated.

The RPD for antimony is outside acceptance limits; likely due to non-homogenous samples.

#### Metals ICP:

#### Batch B6G2610:

MS1/MSD1 (Source Sample 1607003-01): Aluminum and iron spike recoveries are outside the acceptance limits; however, sample concentrations exceeded spike added concentrations by a factor of four or more and the spike recoveries cannot be reliably calculated. Calcium and manganese spike recoveries are outside control limits; the source results are qualified and are estimates. The RPD for manganese is outside acceptance limits, likely due to non-homogenous samples.

MS2/MSD2 (Source Sample 1607007-02): Aluminum, calcium, iron, and manganese spike recoveries are outside the acceptance limits; however, sample concentrations exceed the spike added concentrations by a factor of four or more and the spike recoveries cannot be reliably calculated.

MS3/MSD3 (Source Sample 1607008-07): Aluminum, cadmium, chromium, copper, iron, manganese, nickel, and zinc spike recoveries are outside the acceptance limits; however, the sample concentrations exceed the spike added concentrations by a factor of four or more and the spike recoveries cannot be reliably calculated.

Standard procedures for quality assurance and quality control were followed in the analysis and reporting of the sample results. The results apply only to the samples tested. This final report should only be reproduced in full.

The reporting limit (sometimes referred to as a quantitation limit) is defined as the lowest concentration at which an analyte can be reliably measured and reported without qualification. Reporting limits are adjusted for sample size, dilution, and matrix interference. Concentrations below the reporting limit are reported as non-detects or <RL.

Report Approvals:	
tichard McMillin Region 6 Laboratory Technical Manager	David W. McQuiddy Region 6 Laboratory Branch Chief



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607003-01

Date Collected: 07/18/16

Sample Type: Solid

Batch: B6G2610

Sample Wt: 0.585g %Solids: 78.05

Station ID: SE-11

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	2,850		11.0	1	07/26/16	07/28/16
Barium (7440-39-3)	47.4		1.1	н	н	н
Beryllium (7440-41-7)	0.6		0.5	н	ŧt	tŧ
Cadmium (7440-43-9)	U		0.5	n	11	н
Calcium (7440-70-2)	41,900	J	16.4	н	tt	Ħ
Chromium (7440-47-3)	3.5		1.1	Ħ	Ħ	н
Cobalt (7440-48-4)	2.4		2.2	n	Ħ	ti .
Copper (7440-50-8)	6.6		2.2	n	**	Ħ
Iron (7439-89-6)	3,040		2.7	**	**	**
Magnesium (7439-95-4)	495		16.4	H	11	r#
Manganese (7439-96-5)	68.1	J	0.5	**	*1	"
Nickel (7440-02-2)	5.9		2.2	Ħ	11	Ħ
Potassium (7440-09-7)	383		110	H	**	"
Silver (7440-22-4)	U		1.1	ij	11	"
Sodium (7440-23-5)	88.3		54.8	"	11	**
Vanadium (7440-62-2)	13.0		2.2	"	11	"
Zinc (7440-66-6)	15.2		2.2	**	11	**

ts



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607003-01

Solid

Station ID: SE-11

Batch: B6G2611 Sample Type:

Date Collected: 07/18/16 Sample Wt: 0.585g %Solids: 78.05

Sample Qualifiers:

#### Targets

		•				
Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U	UJ	0.5	10	07/26/16	08/01/16
Arsenic (7440-38-2)	0.5		0.5	78	ŧī	**
Lead (7439-92-1)	7.3	В	0.5	91	ti	**
Selenium (7782-49-2)	U		1.1	11	ŧı	"
Thallium (7440-28-0)	U		0.5	**	ŧt	**

KD



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607003-01 Station ID: SE-11

Batch: B6G2705

Sample Type: Solid

Date Collected: 07/18/16

Sample Qualifiers:

Sample Wt: 0.182g %Solids: 78.05

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.056	1	08/01/16	08/02/16



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607003-02 Station ID: SE-12

Batch: B6G2610 Date Collected: 07/18/16 Sample Type: Solid Sample Wt: 0.6g %Solids: 77.96

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result Analyte mg/Kg dry Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	4,250	10.7	1	07/26/16	07/28/16
Barium (7440-39-3)	46.7	1.1	ti	11	н
Beryllium (7440-41-7)	0.5	0.5	Ħ	11	н
Cadmium (7440-43-9)	0.6	0.5	ŦĬ	11	rt
Calcium (7440-70-2)	43,900	16.0	ei	11	tt
Chromium (7440-47-3)	6.5	1.1	Ħ	11	tt
Cobalt (7440-48-4)	5.6	2.1	ti	31	**
Copper (7440-50-8)	6.5	2.1	н	11	11
Iron (7439-89-6)	9,450	2.7	**	11	ŧ1
Magnesium (7439-95-4)	1,100	16.0	tt	11	н
Manganese (7439-96-5)	339	0.5	1)	11	tr
Nickel (7440-02-2)	10.7	2.1	ti	11	tt
Potassium (7440-09-7)	726	107	Ħ	11	Ħ
Silver (7440-22-4)	U	1.1	tf	17	tf
Sodium (7440-23-5)	117	53.4	Ħ	11	tt
Vanadium (7440-62-2)	18.8	2.1	н	11	tt
Zinc (7440-66-6)	20.0	2.1	ti	11	ŧŧ



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607003-02

Station ID: SE-12

Batch: B6G2611

Sample Type: Solid

Date Collected: 07/18/16

Sample Wt: 0.6g %Solids: 77.96

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		0.5	10	07/26/16	08/01/16
Arsenic (7440-38-2)	4.2		0.5	tt	н	11
Lead (7439-92-1)	10.0	В	0.5	Ħ	11	11
Selenium (7782-49-2)	U		1.1	Ħ	ŧŧ	11
Thallium (7440-28-0)	U		0.5	H	"	19

KD



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607003-02

Date Collected: 07/18/16

Batch: B6G2705 Sample Type: Solid

Sample Wt: 0.187g %Solids: 77.96 Station ID: SE-12

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.055	1	08/01/16	08/02/16

sm

Project #: 16SF093 Report Name:
Page 11 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607003-03

Batch: B6G2610 Sample Type: Solid Date Collected: 07/18/16 Sample Wt: 0.602g

%Solids: 72.43

Station ID: SE-13

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result Analyte mg/Kg dry Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	3,270	11.5	1	07/26/16	07/28/16
Barium (7440-39-3)	51.6	1.1	11	Ħ	**
Beryllium (7440-41-7)	U	0.6	11	H	11
Cadmium (7440-43-9)	0.6	0.6	Ħ	н	31
Calcium (7440-70-2)	51,300	17.2	Ħ	н	11
Chromium (7440-47-3)	6.8	1.1	ti	н	31
Cobalt (7440-48-4)	4.4	2.3	11	н	11
Copper (7440-50-8)	7.4	2.3	ti	ti	11
Iron (7439-89-6)	7,430	2.9	н	tt	11
Magnesium (7439-95-4)	1,000	17.2	ti	Ħ	11
Manganese (7439-96-5)	225	0.6	н	tt	11
Nickel (7440-02-2)	8.3	2.3	Ħ	ŧī	11
Potassium (7440-09-7)	629	115	Ħ	ti	11
Silver (7440-22-4)	U	1.1	Ħ	ŧī	н
Sodium (7440-23-5)	71.0	57.3	Ħ	***	н
Vanadium (7440-62-2)	13.6	2.3	н	ŧt.	ti
Zinc (7440-66-6)	25.0	2.3	fţ	*1	н

ts

Project #: 16SF093 Report Name:
Page 12 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607003-03

Station ID: SE-13

Batch: B6G2611

Sample Type: Solid

Date Collected: 07/18/16 Sample Wt: 0.602g

Sample Qualifiers:

%Solids: 72,43

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		0.6	10	07/26/16	08/01/16
Arsenic (7440-38-2)	3.0		0.6	**	11	**
Lead (7439-92-1)	15.6	В	0.6	**	**	**
Selenium (7782-49-2)	U		1.1	*1	11	"
Γhallium (7440-28-0)	U		0.6	n	11	**
						22

KD

Project #: 16SF093



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607003-03

Station ID: SE-13

Batch: B6G2705

Sample Type: Solid

Date Collected: 07/18/16

Sample Qualifiers:

Sample Wt: 0.176g %Solids: 72.43

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.063	1	08/01/16	08/02/16

SfD

Project #: 16SF093 Report Name:
Page 14 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607003-04

Batch: B6G2512

Sample Type: Liquid

Date Collected: 07/18/16 Sample Vol: 50ml

Sample Qualifiers:

Station ID: SW-11

#### **Targets**

Analyte (CAS Number)	Result Analyte μg/L Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U	100	1	07/25/16	07/27/16
Barium (7440-39-3)	85.7	10.0	ŧt	11	99
Beryllium (7440-41-7)	U	5.0	ŧI	19	11
Cadmium (7440-43-9)	U	5.0	#1	11	11
Calcium (7440-70-2)	128,000	150	ţ1	11	11
Chromium (7440-47-3)	U	10.0	ŧI.	17	**
Cobalt (7440-48-4)	U	20.0	н	11	11
Copper (7440-50-8)	U	20.0	н	11	**
Iron (7439-89-6)	434	25.0	н	ìŧ	**
Magnesium (7439-95-4)	8,310	150	н	11	11
Manganese (7439-96-5)	257	5.0	н	11	11
Nickel (7440-02-2)	U	20.0	н	11	31
Potassium (7440-09-7)	2,510	1,000	н	le	17
Silver (7440-22-4)	U	10.0	n	11	11
Sodium (7440-23-5)	79,000	500	n	19	11
Vanadium (7440-62-2)	U	20.0	Ħ	11	11
Zinc (7440-66-6)	U	20.0	н	19	19

ts



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607003-04 Station ID: SW-11

Batch: B6G2513

Sample Type: Liquid

Date Collected: 07/18/16 Sample Vol: 50ml

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	07/25/16	07/28/16
Arsenic (7440-38-2)	2.0		2.0	**	19	ŧŧ.
Cadmium (7440-43-9)	U		2.0	11	11	**
Copper (7440-50-8)	U		4.0	11	19	**
Lead (7439-92-1)	U		2.0	u	U	<b>#</b> #
Selenium (7782-49-2)	U		4.0	31	D	**
Silver (7440-22-4)	U		2.0	11	10	**
Thallium (7440-28-0)	U		2.0	11	H	**

KD

Project #: 16SF093 Report Name: Page 16 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607003-04

Station ID: SW-11

Batch: B6G2706

Date Collected: 07/18/16 Sample Vol: 25ml

Sample Qualifiers:

Sample Type: Liquid

#### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	I	08/02/16	08/03/16

sm

Project #: 16SF093



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone (281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607003-05

Sample Type: Liquid

Batch: B6G2512

Date Collected: 07/18/16

Sample Vol: 50ml

Sample Qualifiers:

Station ID: SW-12

#### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	324		100	1	07/25/16	07/27/16
Barium (7440-39-3)	86.1		10.0	***	tt	Ħ
Beryllium (7440-41-7)	U		5.0	11	Ħ	tt
Cadmium (7440-43-9)	U		5.0	11	ŧŧ	Ħ
Calcium (7440-70-2)	128,000		150	11	Ħ	Ħ
Chromium (7440-47-3)	U		10.0	11	н	**
Cobalt (7440-48-4)	· U		20.0	11	н	tt
Copper (7440-50-8)	U		20.0	11	Ħ	***
Iron (7439-89-6)	439		25.0	11	ŧŧ	ŧr
Magnesium (7439-95-4)	8,240		150	#	**	"
Manganese (7439-96-5)	205		5.0	11	**	"
Nickel (7440-02-2)	U		20.0	11	#1	"
Potassium (7440-09-7)	2,640		1,000	11	**	**
Silver (7440-22-4)	Ŭ		10.0	Ħ	<b>\$</b> }	**
Sodium (7440-23-5)	76,000		500	н	**	"
Vanadium (7440-62-2)	U		20.0	n	<b>5</b> 1	že.
Zinc (7440-66-6)	U		20.0	H	**	**



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607003-05

Station ID: SW-12

Batch: B6G2513 Sample Type: Liquid Date Collected: 07/18/16 Sample Vol: 50ml

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	07/25/16	07/28/16
Arsenic (7440-38-2)	U		2.0	11	11	11
Cadmium (7440-43-9)	U		2.0	11	11	**
Copper (7440-50-8)	13.9		4.0	tt	**	71
Lead (7439-92-1)	5.1	В	2.0	11	**	11
Selenium (7782-49-2)	U		4.0	11	•	*1
Silver (7440-22-4)	U		2.0	11	11	11
Thallium (7440-28-0)	U		2.0	u	**	11

KD

Project #: 16SF093 Report Name:
Page 19 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607003-05

Sample Type: Liquid

Station ID: SW-12

Batch: B6G2706

Date Collected: 07/18/16

Sample Vol: 25ml

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	ì	08/02/16	08/03/16

sm

Report Name: Project #: 16SF093 Page 20 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607003-06

Batch: B6G2512 Sample Type: Liquid Date Collected: 07/18/16 Sample Vol: 50ml

Station ID: SW-13

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	1,560		100	1	07/25/16	07/27/16
Barium (7440-39-3)	63.4		10.0	н	11	11
Beryllium (7440-41-7)	U		5.0	ti	11	"
Cadmium (7440-43-9)	U		5.0	н	19	**
Calcium (7440-70-2)	50,800		150	Ħ	10	**
Chromium (7440-47-3)	U		10.0	н	11	**
Cobalt (7440-48-4)	U		20.0	н	11	**
Copper (7440-50-8)	U		20.0	n	11	**
Iron (7439-89-6)	1,870		25.0	n	11	**
Magnesium (7439-95-4)	5,140		150	u	11	**
Manganese (7439-96-5)	144		5.0	н	11	**
Nickel (7440-02-2)	U		20.0	н	11	11
Potassium (7440-09-7)	5,340		1,000	н	11	**
Silver (7440-22-4)	U		10.0	n	11	**
Sodium (7440-23-5)	22,600		500	11	16	**
Vanadium (7440-62-2)	U		20.0	н	11	31
Zinc (7440-66-6)	U		20.0	II	11	ŧŧ

Project #: 16SF093



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607003-06

Station ID: SW-13

Batch: B6G2513

Sample Type: Liquid

Date Collected: 07/18/16

Sample Vol: 50ml

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	07/25/16	07/28/16
Arsenic (7440-38-2)	2.9		2.0	tt	19	Ħ
Cadmium (7440-43-9)	U		2.0	et	11	tt
Copper (7440-50-8)	U		4.0	**	н	**
Lead (7439-92-1)	3.4	В	2.0	**	tt	tt
Selenium (7782-49-2)	U		4.0	**	н	"
Silver (7440-22-4)	U		2.0	11	ŧI	"
Thallium (7440-28-0)	U		2.0	11	11	"
						KI

Project #: 16SF093 Report Name:

Page 22 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607003-06

Station ID: SW-13

Batch: B6G2706

Date Collected: 07/18/16 Sample Vol: 25ml

Sample Qualifiers:

Sample Type: Liquid

#### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	l	08/02/16	08/03/16

sm

Project #: 16SF093 Report Name:
Page 23 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607007-02

Batch: B6G2610 Sample Type: Solid Date Collected: 07/19/16 Sample Wt: 0.848g %Solids: 65.67

Sample Qualifiers:

Station ID: SE-06

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	7,870		35.9	4	07/26/16	07/28/16
Barium (7440-39-3)	120		3.6	**	"	**
Beryllium (7440-41-7)	0.7		0.4	1	11	**
Cadmium (7440-43-9)	0.7		0.4	11	17	11
Calcium (7440-70-2)	136,000		53.9	4	19	17
Chromium (7440-47-3)	61.4		3.6	11	11	19
Cobalt (7440-48-4)	10.4		7,2	11	н	ti
Copper (7440-50-8)	15.8		7.2	11	н	H
Iron (7439-89-6)	10,500		9.0	н	tt	Ħ
Magnesium (7439-95-4)	1,880		53.9	н	ŧI	H
Manganese (7439-96-5)	1,530		1.8	Ħ	Ħ	н
Nickel (7440-02-2)	20.1		7.2	If	Ħ	n
Potassium (7440-09-7)	1,040		359	tt	41	Ħ
Silver (7440-22-4)	U		0.9	1	ŧŧ	**
Sodium (7440-23-5)	U		180	4	91	**
Vanadium (7440-62-2)	35.2		7.2	tt	91	**
Zinc (7440-66-6)	49.6		7.2	tt	<b>1</b> 1	**

1s



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607007-02

Station ID: SE-06

Batch: B6G2611 Sample Type: Solid

Date Collected: 07/19/16 Sample Wt: 0.848g %Solids: 65.67

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U	UJ	0.4	10	07/26/16	08/01/16
Arsenic (7440-38-2)	8.0		0.4	ei .	11	51
Lead (7439-92-1)	36.5	J	0.4	*(	11	11
Selenium (7782-49-2)	U		0.9	ŧI	11	11
Thallium (7440-28-0)	0.4		0.4	Ħ	11	**

KD

Project #: 16SF093



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607007-02

Station ID: SE-06

Batch: B6G2705

Sample Type: Solid

Date Collected: 07/19/16 Sample Wt: 0.176g

%Solids: 65.67

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	0.091		0.069	1	08/01/16	08/02/16

Sit

Project #: 16SF093 Report Name:
Page 29 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607007-03

Batch: B6G2610

Sample Type: Solid

Date Collected: 07/19/16 Sample Wt: 0.888g

%Solids: 58.61

Station ID: SE-07

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	7,940		38.4	4	07/26/16	07/28/16
Barium (7440-39-3)	113		1.0	1	n	Ħ
Beryllium (7440-41-7)	0.7		0.5	**	11	н
Cadmium (7440-43-9)	0.8		0.5	Ħ	11	Ħ
Calcium (7440-70-2)	143,000		57.6	4	н	н
Chromium (7440-47-3)	83.4		3.8	Ħ	11	11
Cobalt (7440-48-4)	9.6		7.7	***	и	ţſ
Copper (7440-50-8)	17.3		7.7	ŧì	11	н
Iron (7439-89-6)	10,600		9.6	n	11	Ħ
Magnesium (7439-95-4)	1,980		57.6	tt	Ħ	H
Manganese (7439-96-5)	1,130		1.9	н	11	U
Nickel (7440-02-2)	22.3		7.7	ti	11	11
Potassium (7440-09-7)	1,130		384	н	11	н
Silver (7440-22-4)	U		1.0	1	11	. и
Sodium (7440-23-5)	U		192	4	11	н
Vanadium (7440-62-2)	38.0		7.7	n .	Ħ	н
Zinc (7440-66-6)	67.3		7.7	Ħ	11	11

ts

Project #: 16SF093

Report Name: Page 30 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607007-03 Station ID: SE-07

Batch: B6G2611 Date Collected: 07/19/16 Sample Type: Solid Sample Wt: 0.888g %Solids: 58.61

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)		alyte difiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		0.5	10	07/26/16	08/01/16
Arsenic (7440-38-2)	7.4		0.5	Ħ	Ħ	##
Lead (7439-92-1)	44.0		0.5	"	н	**
Selenium (7782-49-2)	U		1.0	#F	н	**
Thallium (7440-28-0)	U		0.5	**	H	**
						KD



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607007-03

Station ID: SE-07

Batch: B6G2705 Sample Type: Solid

Date Collected: 07/19/16 Sample Wt: 0.196g %Solids: 58.61

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	0.143		0.070	1	08/01/16	08/02/16

sm

Project #: 16SF093 Report Name:
Page 32 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607007-04

Station ID: SE-10

Batch: B6G2610 Sample Type: Solid

Date Collected: 07/19/16 Sample Wt: 0.562g %Solids: 84.51

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result Analy mg/Kg dry Qualifi		Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	6,610	42.1	4	07/26/16	07/28/16
Barium (7440-39-3)	85.9	4.2	**	н	11
Beryllium (7440-41-7)	0.7	0.5	1	Ħ	11
Cadmium (7440-43-9)	0.8	0.5	# <b>1</b>	н	31
Calcium (7440-70-2)	157,000	63.2	4	tt	11
Chromium (7440-47-3)	38.3	1.1	1	n	11
Cobalt (7440-48-4)	U	8.4	4	tt	11
Copper (7440-50-8)	14.7	8.4	**	tt.	Ħ
Iron (7439-89-6)	9,350	10.5	11	**	н
Magnesium (7439-95-4)	1,700	63.2	11	**	n
Manganese (7439-96-5)	880	2.1	11	**	rı
Nickel (7440-02-2)	19.8	8.4	11	**	н
Potassium (7440-09-7)	872	421	11	**	**
Silver (7440-22-4)	U	1.1	1	ėŧ	n .
Sodium (7440-23-5)	U	211	4	**	ti
Vanadium (7440-62-2)	32.0	8.4	Ħ	##	н
Zinc (7440-66-6)	64.8	8.4	11	**	rt .

15



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607007-04

Station ID: SE-10

Batch: B6G2611

Sample Type: Solid

Date Collected: 07/19/16

Sample Wt: 0.562g

Sample Qualifiers:

%Solids: 84.51

#### **Targets**

Analyte (CAS Number)	Result Analyte mg/Kg dry Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U	0.5	10	07/26/16	08/01/16
Arsenic (7440-38-2)	6.5	0.5	**	ŧŧ	11
Lead (7439-92-1)	107	0,5	#f	ŧt	11
Selenium (7782-49-2)	U	1.1	**	Ħ	11
Thallium (7440-28-0)	U	0.5	11	***	17
					KE

Project #: 16SF093 Report Name: Page 34 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607007-04

Station ID: SE-10

Batch: B6G2705 Sample Type: Solid Date Collected: 07/19/16 Sample Wt: 0.137g %Solids: 84.51

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	0.117		0.069	1	08/01/16	08/02/16

SIT

Project #: 16SF093 Report Name:
Page 35 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607007-07

Date Collected: 07/19/16

Batch: B6G2512 Sample Type: Liquid

Sample Vol: 50ml

Sample Qualifiers:

Station ID: SW-06

#### **Targets**

		0				
Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	171		100	]	07/25/16	07/27/16
Barium (7440-39-3)	88.3		10.0	11	**	19
Beryllium (7440-41-7)	U		5.0	н	ŧr	9
Cadmium (7440-43-9)	U		5.0	11	tt.	11
Calcium (7440-70-2)	101,000		150	11	**	11
Chromium (7440-47-3)	U		10.0	11	ŧŧ	11
Cobalt (7440-48-4)	U		20.0	11	ŧŧ	11
Copper (7440-50-8)	U		20.0	11	**	11
Iron (7439-89-6)	372		25.0	11	#1	11
Magnesium (7439-95-4)	3,230		150	11	**	H
Manganese (7439-96-5)	262		5.0	17	**	II
Nickel (7440-02-2)	U		20.0	11	**	n
Potassium (7440-09-7)	2,960		1,000	11	Ħ	n
Silver (7440-22-4)	U		10.0	11	**	н
Sodium (7440-23-5)	16,200		500	11	**	11
Vanadium (7440-62-2)	U		20.0	11	**	н
Zinc (7440-66-6)	U		20.0	11	**	н

ts

Project #: 16SF093 Report Name: Page 42 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

# Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607007-07

Sample Type: Liquid

Batch: B6G2513

Date Collected: 07/19/16

Sample Vol: 50ml

Station ID: SW-06

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	07/25/16	07/28/16
Arsenic (7440-38-2)	4.0		2.0	Ħ	н	ŧr
Cadmium (7440-43-9)	U		2.0	***	н	**
Copper (7440-50-8)	U		4.0	Ħ	н	**
Lead (7439-92-1)	2.5	В	2.0	**	Ħ	**
Selenium (7782-49-2)	U		4.0	tt.	н	et
Silver (7440-22-4)	U		2.0	**	н	**
Thallium (7440-28-0)	U		2.0	**	н	**

KD

Project #: 16SF093 Report Name: Page 43 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607007-07

Station ID: SW-06

Batch: B6G2706

Date Collected: 07/19/16 Sample Vol: 25ml

Sample Qualifiers:

Sample Type: Liquid

#### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	08/02/16	08/03/16

sm

Project #: 16SF093 Report Name:
Page 44 of 150



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607007-08

Date Collected: 07/19/16

Sample Type: Liquid

Batch: B6G2512

Sample Vol: 50ml

Sample Qualifiers:

Station ID: SW-07

#### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	381		100	1	07/25/16	07/27/16
Barium (7440-39-3)	83.6		10.0	tt	Ħ	11
Beryllium (7440-41-7)	U		5.0	n	н	11
Cadmium (7440-43-9)	U		5.0	H	н	31
Calcium (7440-70-2)	100,000		150	11	Ħ	11
Chromium (7440-47-3)	U		10.0	н	н	33
Cobalt (7440-48-4)	U		20.0	И	н	17
Copper (7440-50-8)	U		20.0	H	н	11
Iron (7439-89-6)	531		25.0	11	tt	39
Magnesium (7439-95-4)	3,160		150	11	Ħ	31
Manganese (7439-96-5)	265		5.0	11	tt	11
Nickel (7440-02-2)	U		20.0	11	н	31
Potassium (7440-09-7)	2,850		1,000	н	tt	11
Silver (7440-22-4)	U		10.0	н	н	11
Sodium (7440-23-5)	15,400		500	11	н	11
Vanadium (7440-62-2)	U		20.0	н	н	11
Zinc (7440-66-6)	U		20.0	11	н	11

ts



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607007-08

Station ID: SW-07

Batch: B6G2513

Sample Type: Liquid

Date Collected: 07/19/16 Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U	•	2.0	4	07/25/16	07/28/16
Arsenic (7440-38-2)	3.9		2.0	ŧŧ	11	#
Cadmium (7440-43-9)	U		2,0	ŧr	11	**
Copper (7440-50-8)	U		4.0	ŧŧ	11	**
Lead (7439-92-1)	3.7	В	2.0	ŧr	11	**
Selenium (7782-49-2)	U		4.0	FF	н	**
Silver (7440-22-4)	U		2.0	н	11	ŧi
Fhallium (7440-28-0)	U		2.0	tt	11	**
						кі

Project #: 16SF093

Report Name: Page 46 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607007-08

Station ID: SW-07

Batch: B6G2706 Sample Type: Liquid

Date Collected: 07/19/16 Sample Vol: 25ml

Sample Qualifiers:

### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	08/02/16	08/03/16

em

Project #: 16SF093

Report Name:
Project #: 16SF093



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - ICP

Lab ID: 1607008-02

Batch: B6G2610 Sample Type: Solid Date Collected: 07/20/16 Sample Wt: 0.632g %Solids: 67.59

Sample Qualifiers:

Station ID: SE-02

### **Targets**

Analyte (CAS Number)	Result Anal mg/Kg dry Quali		Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	5,830	46.8	4	07/26/16	07/28/16
Barium (7440-39-3)	73.5	4.7	Ħ	н	11
Beryllium (7440-41-7)	0.6	0.6	1	tt	11
Cadmium (7440-43-9)	0.6	0.6	Ħ	н	11
Calcium (7440-70-2)	161,000	70.2	4	Ħ	11
Chromium (7440-47-3)	7.8	1.2	1	tı	11
Cobalt (7440-48-4)	5.0	2.3	Ħ	ti	11
Copper (7440-50-8)	12.8	2.3	H	н	19
Iran (7439-89-6)	8,330	11.7	4	н	11
Magnesium (7439-95-4)	3,330	70.2	Ħ	н	11
Manganese (7439-96-5)	501	2.3	н	11	11
Nickel (7440-02-2)	15.9	9.4	II	11	11
Potassium (7440-09-7)	1,000	468	11	19	11
Silver (7440-22-4)	U	1.2	1	U	11
Sodium (7440-23-5)	U	234	4	19	11
Vanadium (7440-62-2)	27.6	9.4	11	19	11
Zinc (7440-66-6)	56.7	9.4	19	11	10

ts

Project #: 16SF093 Report Name:
Page 51 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607008-02

Batch: B6G2611 Date Collected: 07/20/16 Sample Type: Solid Sample Wt: 0.632g

%Solids: 67.59

Sample Qualifiers:

Station ID: SE-02

#### **Targets**

Analyte (CAS Number)	Result Analyt mg/Kg dry Qualific		Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U	0.6	10	07/26/16	08/01/16
Arsenic (7440-38-2)	5.0	0.6	rr .	н	11
Lead (7439-92-1)	30.3	0.6	**	н	11
Selenium (7782-49-2)	U	1.2	**	Ħ	H
Thallium (7440-28-0)	U	0.6	**	n	11
					KÐ

Project #: 16SF093 Report Name:



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607008-02

Station ID: SE-02

Batch: B6H0109

Sample Type: Solid

Date Collected: 07/20/16 Sample Wt: 0.179g

%Solids: 67.59

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.066	***	08/04/16	08/04/16

sm

Project #: 16SF093



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607008-06

Station ID: SO-02

Batch: B6G2610 Sample Type: Solid

Date Collected: 07/20/16 Sample Wt: 0.541g %Solids: 82.94

Sample Qualifiers:

### **Targets**

Analyte (CAS Number)	Result Analyte mg/Kg dry Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	6,200	44.6	4	07/26/16	07/28/16
Barium (7440-39-3)	77.6	4.5	11	it	tt
Beryllium (7440-41-7)	0.6	0.6	1	11	н
Cadmium (7440-43-9)	0.6	0.6	11	Iŧ	н
Calcium (7440-70-2)	165,000	66.9	4	11	ŧŧ
Chromium (7440-47-3)	7.9	1.1	1	19	н
Cobalt (7440-48-4)	4.8	2.2	#1	11	ŧŧ
Copper (7440-50-8)	11.1	8.9	4	Ħ	н
Iron (7439-89-6)	7,440	11.1	11	H	ŧŧ
Magnesium (7439-95-4)	1,810	66.9	ti	19	Ħ
Manganese (7439-96-5)	651	2.2	Ħ	H	ŧı
Nickel (7440-02-2)	15.2	8.9	ti	11	tt
Potassium (7440-09-7)	1,010	446	**	11	tt
Silver (7440-22-4)	U	1.1	1	H	**
Sodium (7440-23-5)	U	223	4	н	**
Vanadium (7440-62-2)	25.4	8.9	11	н	ŧŧ
Zinc (7440-66-6)	36.1	8.9	n	li .	**

ts

Project #: 16SF093 Report Name:
Page 63 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607008-06

Station ID: SO-02

Batch: B6G2611 Sample Type: Solid

Date Collected: 07/20/16 Sample Wt: 0,541g %Solids: 82.94

Sample Qualifiers:

\_\_\_

### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		0,6	10	07/26/16	08/02/16
Arsenic (7440-38-2)	4.6		0.6	H	**	*1
Lead (7439-92-1)	24.6		0.6	ti	**	17
Selenium (7782-49-2)	U		1.1	ti	**	**
Thallium (7440-28-0)	U		0.6	И	*1	**
						1675

KĐ

Project #: 16SF093



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607008-06 Station ID: SO-02

Batch: B6H0109 Date Collected: 07/20/16
Sample Type: Solid Sample Wt: 0.139g
%Solids: 82.94

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.069	1	08/04/16	08/04/16

C 17

Project #: 16SF093 Report Name:
Page 65 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607010-01

Station ID: SE-08

Batch: B6G2610 Sample Type: Solid

Date Collected: 07/21/16 Sample Wt: 0.811g %Solids: 65.68

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result Analyte mg/Kg dry Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	5,750	37.5	4	07/26/16	07/28/16
Barium (7440-39-3)	69.8	3.8	41	11	н
Beryllium (7440-41-7)	0.5	0.5	1	11	tt
Cadmium (7440-43-9)	0.8	0.5	<b>†</b> 1	11	n
Calcium (7440-70-2)	148,000	56.3	4	15	n
Chromium (7440-47-3)	31.5	3.8	ŧI	11	н
Cobalt (7440-48-4)	4.9	1.9	1	1)	н
Copper (7440-50-8)	16.1	7.5	4	19	н
Iron (7439-89-6)	7,920	9.4	н	11	н
Magnesium (7439-95-4)	1,590	56.3	Ħ	11	tt
Manganese (7439-96-5)	473	1.9	n	11	n
Nickel (7440-02-2)	14.6	7.5	Ħ	17	n
Potassium (7440-09-7)	867	375	n	11	н
Silver (7440-22-4)	U	0.9	1	13	н
Sodium (7440-23-5)	U	188	4	19	н
Vanadium (7440-62-2)	27.8	7.5	n n	11	н
Zinc (7440-66-6)	74.3	7.5	n	11	н

.

Project #: 16SF093

Report Name: Page 90 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607010-01

Station ID: SE-08

Batch: B6G2611

Sample Type: Solid

Date Collected: 07/21/16 Sample Wt: 0.811g

%Solids: 65.68

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		0.5	10	07/26/16	08/02/16
Arsenic (7440-38-2)	3.6		0.5	37	**	11
Lead (7439-92-1)	109		0.5	11	**	17
Selenium (7782-49-2)	U		0,9	11	**	**
Thallium (7440-28-0)	U		0.5	11	11	11

KD

Project #: 16SF093 Report Name:
Page 91 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607010-01

Station ID: SE-08

Batch: B6H0109

Sample Type: Solid

Date Collected: 07/21/16 Sample Wt: 0.194g %Solids: 65.68

Sample Qualifiers:

### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	0.074		0.063	ı	08/04/16	08/04/16

sm

Project #: 16SF093 Report Name:



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607010-02

Batch: B6G2610

Sample Type: Solid

Date Collected: 07/21/16 Sample Wt: 0.956g %Solids: 43.89

Sample Qualifiers:

Station ID: SE-09

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	7,860		47.7	4	07/26/16	07/28/16
Barium (7440-39-3)	89.1		4.8	**	11	**
Beryllium (7440-41-7)	0.7		0.6	1	19	**
Cadmium (7440-43-9)	0.9		0.6	11	11	**
Calcium (7440-70-2)	146,000		71.5	4	11	11
Chromium (7440-47-3)	19.5		4.8	11	ti	11
Cobalt (7440-48-4)	6.4		2.4	I	н	17
Copper (7440-50-8)	21.9		9.5	4	н	11
Iron (7439-89-6)	10,100		11.9	н	Ħ	11
Magnesium (7439-95-4)	1,900		71.5	11	н	It
Manganese (7439-96-5)	500		2.4	11	ti	11
Nickel (7440-02-2)	18.6		9.5	11	ti	n
Potassium (7440-09-7)	1,220		477	11	Ħ	н
Silver (7440-22-4)	U		1.2	1	<b>†1</b>	н
Sodium (7440-23-5)	U		238	4	Ħ	ŧτ
Vanadium (7440-62-2)	34.3		9.5	М	**	Ħ
Zinc (7440-66-6)	81.5		9.5	n	***	п

ts

Project #: 16SF093 Report Name:
Page 93 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607010-02

Station ID: SE-09

Batch: B6G2611 Sample Type: Solid

Date Collected: 07/21/16 Sample Wt: 0.956g %Solids: 43.89

Sample Qualifiers:

**Targets** 

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		0.6	10	07/26/16	08/02/16
Arsenic (7440-38-2)	4.7		0.6	tt	Ħ	<b>5</b> 7
Lead (7439-92-1)	70.6		0.6	n	tt	#
Sefenium (7782-49-2)	U		1.2	#1	ŧŧ	**
Thallium (7440-28-0)	U		0.6	rt	tt	**
						КD

Project #: 16SF093



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607010-02 Station ID: SE-09

Batch: B6H0109 Date Collected: 07/21/16
Sample Type: Solid Sample Wt: 0.235g
%Solids: 43.89

Sample Qualifiers:

### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	0.085		0.078	juvet O	08/04/16	08/04/16

sm

Project #: 16SF093 Report Name:



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - ICP

Lab ID: 1607010-03

Batch: B6G2610

Sample Type: Solid

Date Collected: 07/21/16 Sample Wt: 0.941g

%Solids: 62.32

#### **Targets**

Analyte (CAS Number)	Result Analyte mg/Kg dry Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	5,180	34.1	4	07/26/16	07/28/16
Barium (7440-39-3)	66.8	3.4	11	11	H
Beryllium (7440-41-7)	0.5	0.4	1	tt	н
Cadmium (7440-43-9)	0.8	0.4	17	н	н
Calcium (7440-70-2)	160,000	51.2	4	tt	н
Chromium (7440-47-3)	28.6	3.4	11	ft	Ħ
Cobalt (7440-48-4)	5.1	1.7	1	tt	н
Copper (7440-50-8)	14.7	6.8	4	tt	Ħ
Iron (7439-89-6)	8,830	8.5	18	н	n
Magnesium (7439-95-4)	1,560	51.2	11	Ħ	Ħ
Manganese (7439-96-5)	501	1.7	<b>11</b>	п	ti
Nickel (7440-02-2)	14.7	6.8	4#	tt	н
Potassium (7440-09-7)	784	341	17	tt	н
Silver (7440-22-4)	U	0.9	1	ti	*1
Sodium (7440-23-5)	U	171	4	п	Ħ
Vanadium (7440-62-2)	28.0	6.8	**	ff	ti
Zinc (7440-66-6)	70.9	6.8	11	n	Ħ

ts

Station ID: SE-14

Sample Qualifiers:

Project #: 16SF093

Report Name: Page 96 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607010-03

Station ID: SE-14

Batch: B6G2611

Sample Type: Solid

Date Collected: 07/21/16

Sample Qualifiers:

Sample Wt: 0.941g %Solids: 62.32

### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		0.4	10	07/26/16	08/02/16
Arsenic (7440-38-2)	5.1		0.4	**	"	58
Lead (7439-92-1)	131		0.4	**	**	**
Selenium (7782-49-2)	U		0,9	57	**	***
Thallium (7440-28-0)	U		0.4	11	11	11

KĐ

Project #: 16SF093 Report Name:
Page 97 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607010-03

Station ID: SE-14

Batch: B6H0109 Sample Type: Solid

Date Collected: 07/21/16 Sample Wt: 0.198g %Solids: 62.32

Sample Qualifiers:

### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	0.098		0.065	1	08/04/16	08/04/16

sm

Project #: 16SF093



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - ICP

Lab ID: 1607010-04

Batch: B6G2610

Date Collected: 07/21/16

Sample Type: Solid Sample Wt: 0.977g %Solids: 50.02

Sample Qualifiers:

Station ID: SE-15

#### **Targets**

Analyte (CAS Number)	Result Analyte mg/Kg dry Qualifier		Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	6,910	40.9	4	07/26/16	07/28/16
Barium (7440-39-3)	73.3	4.1	**	11	11
Beryllium (7440-41-7)	0.6	0.5	1	11	11
Cadmium (7440-43-9)	0.7	0.5	ŦĒ	11	11
Calcium (7440-70-2)	121,000	61.4	4	u	37
Chromium (7440-47-3)	18.0	4.1	**	11	11
Cobalt (7440-48-4)	. 5.6	2.0	1	n	17
Copper (7440-50-8)	18.4	8.2	4	Ħ	11
Iron (7439-89-6)	8,640	10.2	**	11	11
Magnesium (7439-95-4)	1,660	61.4	11	Ħ	ษ
Manganese (7439-96-5)	426	2.0	11	н	11
Nickel (7440-02-2)	16.0	8.2	10	н	н
Potassium (7440-09-7)	1,060	409	11	n	н
Silver (7440-22-4)	U	1.0	1	tt	tt
Sodium (7440-23-5)	U	205	4	Ħ	н
Vanadium (7440-62-2)	28.2	8.2	11	n	tt
Zinc (7440-66-6)	73.3	8.2	31	*1	н

ts

Project #: 16SF093 Report Name:



# **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607010-04

Station ID: SE-15

Batch: B6G2611 Sample Type: Solid Date Collected: 07/21/16 Sample Wt: 0.977g %Solids: 50.02

Sample Qualifiers:

#### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		0.5	10	07/26/16	08/02/16
Arsenic (7440-38-2)	4.0		0.5	**	Ħ	17
Lead (7439-92-1)	61.5		0.5	**	ŧ1	19
Selenium (7782-49-2)	U		1.0	**	Ħ	11
Thallium (7440-28-0)	U		0.5	77	11	11
	i e					KE

Project #: 16SF093



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607010-04

Station ID: SE-15

Batch: B6H0109

Sample Type: Solid

Date Collected: 07/21/16 Sample Wt: 0.235g

%Solids: 50.02

Sample Qualifiers:

### **Targets**

Analyte (CAS Number)	Result mg/Kg dry	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	0.086		0.068	1	08/04/16	08/04/16

sm

Project #: 16SF093 Report Name:



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - ICP

Lab ID: 1607010-05

Date Collected: 07/21/16

Batch: B6G2512 Sample Type: Liquid

Sample Vol: 50ml

Sample Qualifiers:

Station ID: SW-08

### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	386		100	1	07/25/16	07/27/16
Barium (7440-39-3)	82.8		10.0	"	н	11
Beryllium (7440-41-7)	U		5.0	19	Ħ	11
Cadmium (7440-43-9)	U		5.0	**	н	ti
Calcium (7440-70-2)	81,000		150	"	tt	tt
Chromium (7440-47-3)	U		10.0	***	tt	Ħ
Cobalt (7440-48-4)	U		20.0	11	н	Ħ
Copper (7440-50-8)	U		20.0	11	tt	н
Iron (7439-89-6)	528		25.0	**	Ħ	tf
Magnesium (7439-95-4)	2,550		150	11	ęı .	Ħ
Manganese (7439-96-5)	974		5.0	71	ŧŧ	tt.
Nickel (7440-02-2)	U		20.0	11	ŧI	H
Potassium (7440-09-7)	3,370		1,000	11	ŧŧ	**
Silver (7440-22-4)	U		10.0		Ħ	**
Sodium (7440-23-5)	12,600		500	11	ŧŧ	**
Vanadium (7440-62-2)	U		20.0	11	<b>11</b>	"
Zinc (7440-66-6)	U		20.0	tf	**	15

ts

Project #: 16SF093 Report Name:
Page 102 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607010-05

Station ID: SW-08

Batch: B6G2513

Sample Type: Liquid

Date Collected: 07/21/16

Sample Vol: 50ml

Sample Qualifiers:

### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	07/25/16	07/28/16
Arsenic (7440-38-2)	4.1		2.0	**	**	**
Cadmium (7440-43-9)	U		2.0	**	n	**
Copper (7440-50-8)	U		4.0	**	н	**
Lead (7439-92-1)	3.3		2.0	**	*1	**
Selenium (7782-49-2)	U		4.0	**	Ħ	**
Silver (7440-22-4)	U		2.0	**	н	**
Thallium (7440-28-0)	U		2.0	**	*1	**

KD

Project #: 16SF093 Report Name:
Page 103 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607010-05 Station ID: SW-08

Batch: B6G2706 Sample Type: Liquid Date Collected: 07/21/16

Sample Vol: 25ml

Sample Qualifiers:

### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	08/02/16	08/03/16

sm

Project #: 16SF093 Report Name:



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607010-06 Station ID: SW-09

Batch: B6G2512

Sample Type: Liquid

Date Collected: 07/21/16

Sample Qualifiers:

Sample Vol: 50ml

### **Targets**

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	762		100	1	07/25/16	07/27/16
Barium (7440-39-3)	53.6		10.0	н	Ħ	н
Beryllium (7440-41-7)	U		5.0	**	"	II.
Cadmium (7440-43-9)	Ú		5.0	**	Ħ	Ħ
Calcium (7440-70-2)	70,800		150	**	**	**
Chromium (7440-47-3)	U		10.0	**	Ħ	Ħ
Cobalt (7440-48-4)	U		20.0	**	**	<b>1</b> 1
Copper (7440-50-8)	U		20.0	**	**	#
Iron (7439-89-6)	943		25.0	**	17	11
Magnesium (7439-95-4)	2,400		150	11	11	**
Manganese (7439-96-5)	318		5.0	11	11	"
Nickel (7440-02-2)	U		20.0	11	19	11
Potassium (7440-09-7)	3,660		1,000	11	ti	11
Silver (7440-22-4)	U		10.0	11	11	19
Sodium (7440-23-5)	11,300		500	11	ri	U
Vanadium (7440-62-2)	U		20,0	11	н	н
Zinc (7440-66-6)	U		20.0	11	H	н

ts

Project #: 16SF093

Report Name: Page 105 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607010-06

Station ID: SW-09

Batch: B6G2513

Date Collected: 07/21/16

Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	07/25/16	07/28/16
Arsenic (7440-38-2)	4.0		2.0	H	11	**
Cadmium (7440-43-9)	U		2.0	ti	11	**
Copper (7440-50-8)	U		4.0	н	"	<b>\$1</b>
Lead (7439-92-1)	6.2		2.0	н	11	**
Selenium (7782-49-2)	U		4.0	n	11	#1
Silver (7440-22-4)	U		2.0	Ħ	17	11
Thallium (7440-28-0)	U		2.0	ti	**	11

KD

Project #: 16SF093

Report Name:



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607010-06

Station ID: SW-09

Batch: B6G2706

Sample Type: Liquid

Date Collected: 07/21/16 Sample Vol: 25ml

Sample Qualifiers:

**Targets** 

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	Promet.	08/02/16	08/03/16

SIH

Project #: 16SF093 Report Name:



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607010-07

Batch: B6G2512

Sample Type: Liquid

Date Collected: 07/21/16 Sample Vol: 50ml Station ID: SW-14

Sample Qualifiers:

### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	351		100	1	07/25/16	07/27/16
Barium (7440-39-3)	63.2		10.0	**	11	**
Beryllium (7440-41-7)	U		5.0	**	11	ŧŧ
Cadmium (7440-43-9)	U		5.0	tt	11	Ħ
Calcium (7440-70-2)	82,000		150	tt	11	ŧŧ
Chromium (7440-47-3)	U		10.0	tı	11	ŧŧ
Cobalt (7440-48-4)	U		20.0	tr	11	tt
Copper (7440-50-8)	U		20.0	n	11	Ħ
Iron (7439-89-6)	571		25.0	n	11	ti
Magnesium (7439-95-4)	2,610		150	II	**	n
Manganese (7439-96-5)	359		5.0	H	"	n
Nickel (7440-02-2)	U		20.0	U	"	n
Potassium (7440-09-7)	3,230		1,000	II.	**	11
Silver (7440-22-4)	U		10.0	17	**	11
Sodium (7440-23-5)	13,000		500	17	"	11
Vanadium (7440-62-2)	U		20,0	19	11	Ħ
Zinc (7440-66-6)	U		20.0	#	**	11

t

Project #: 16SF093



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607010-07

Station ID: SW-14

Batch: B6G2513

Sample Type: Liquid

Date Collected: 07/21/16 Sample Vol: 50ml

Sample Qualifiers:

Targets

		14.50				
Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	07/25/16	07/28/16
Arsenic (7440-38-2)	4.3		2.0	11	11	11
Cadmium (7440-43-9)	U		2.0	11	19	**
Copper (7440-50-8)	U		4.0	н	tt	11
Lead (7439-92-1)	3.2		2.0	tt	н	U
Selenium (7782-49-2)	U		4.0	tt	ŧī	н
Silver (7440-22-4)	U		2.0	ŧr	***	Ħ
Thallium (7440-28-0)	U		2.0	**	11	**
						KI

Project #: 16SF093 Report Name:

Page 109 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607010-07

Station ID: SW-14

Batch: B6G2706

Date Collected: 07/21/16 Sample Vol: 25ml

Sample Qualifiers:

Sample Type: Liquid

### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	08/02/16	08/03/16

sm

Project #: 16SF093



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

## Metals by CLP ILMO5.3 - ICP

Lab ID: 1607010-08

31/16

Station ID: SW-15

Batch: B6G2512

Sample Type: Liquid

Date Collected: 07/21/16 Sample Vol: 50ml

Sample Qualifiers:

### **Targets**

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	842		100	1	07/25/16	07/27/16
Barium (7440-39-3)	57.7		10.0	tt	**	**
Beryllium (7440-41-7)	U		5.0	**	11	**
Cadmium (7440-43-9)	U		5.0	**	*1	11
Calcium (7440-70-2)	72,500		150	**	**	11
Chromium (7440-47-3)	U		10.0	fŧ	11	11
Cobalt (7440-48-4)	U		20.0	**	17	11
Copper (7440-50-8)	U		20.0	**	17	11
Iron (7439-89-6)	1,020		25.0	7.5	11	<b>11</b>
Magnesium (7439-95-4)	2,510		150	**	11	11
Manganese (7439-96-5)	399		5.0	19	19	11
Nickel (7440-02-2)	U		20.0	**	31	u
Potassium (7440-09-7)	3,780		1,000	17	11	11
Silver (7440-22-4)	U		10.0	11	17	11
Sodium (7440-23-5)	11,700		500	"	16	н
Vanadium (7440-62-2)	U		20.0	***	19	н
Zinc (7440-66-6)	U		20.0	11	11	ti

18

Project #: 16SF093 Report Name:
Page 111 of 150



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - ICP/MS

Lab ID: 1607010-08 Station ID: SW-15

Batch: B6G2513

Date Collected: 07/21/16

Sample Qualifiers:

Sample Type: Liquid Sample Vol: 50ml

### **Targets**

	Result	Analyte	Reporting			
Analyte (CAS Number)	μg/L	Qualifiers	Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	07/25/16	07/28/16
Arsenic (7440-38-2)	4.5		2.0	*1	11	11
Cadmium (7440-43-9)	U		2.0	n	n	11
Copper (7440-50-8)	U		4.0	n	tt	11
Lead (7439-92-1)	5.7		2.0	Ħ	н	- 11
Selenium (7782-49-2)	U		4.0	n	Ħ	11
Silver (7440-22-4)	U		2.0	H	н	н
Thallium (7440-28-0)	U		2.0	11	tt	n

KD

Project #: 16SF093 Report Name:



## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

### Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1607010-08

Station ID: SW-15

Batch: B6G2706

Sample Type: Liquid

Date Collected: 07/21/16 Sample Vol: 25ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	08/02/16	08/03/16

cm

Project #: 16SF093 Report Name:
Page 113 of 150

## **Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

#### **Notes and Definitions**

UJ The analyte was not detected at or above the reported value. The reported value is an estimate.

J The identification of the analyte is acceptable; the reported value is an estimate.

В Blank Related - The concentration found in the sample was less than 10X the concentration found in the

associated extraction, digestion and/or analysis blank. Presence in the sample is therefore suspect.

Α This sample was extracted at a single acid pH.

HTS Sample was prepared and/or analyzed past recommended holding time. Concentrations should be

considered minimum values.

ABN Acid Base Neutrals (Semivolatile Compounds)

**AES** Atomic Emission Spectrometer

BS Blank Spike

**CVAA** Cold Vapor Atomic Absorption

**DCB** Decachlorobiphenyl

**ECD Electron Capture Detector** 

GCGas Chromatograph

**ICP** Inductively Coupled Plasma

ISTD Internal Standard

LCS Laboratory Control Sample

MS Mass Spectrometer

MS/MSD Matrix Spike/Matrix Spike Duplicate

NA Not Applicable

**NPD** Nitrogen Phosphorous Detector

NR Not Reported

**PCB** Polychlorinatedbiphenyl



## Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

RL Reporting Limit

RT Retention Time

RPD Relative Percent Difference

TCLP Toxicity Characteristic Leaching Procedure

TCMX Tetrachloro-meta-xylene

U Undetected

VOA Volatile Organic Analysis

Initial pressure in air analyses is the pressure at which the canister was received in psia (pounds per square inch absolute pressure).

The pH reported for Volatile liquid samples was tested using a 0-14 pH indicator strip for the purpose of verifying chemical preservation.

The statistical software used for the reporting of toxicity data is ToxCalc 5.0.32, Environmental Toxicity Data Analysis System 1994-2007 Tidepool Scientific Software.

Project #: 16SF093 Report Name:
Page 150 of 150

		·		

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION 6 HOUSTON BRANCH 10625 FALLSTONE RD. HOUSTON, TEXAS 77099

September 1, 2016

#### <u>MEMORANDUM</u>

	Case#:	46321
	Site:	LANE PLATING WORKS
TO:	Bret Kendrid	ck, Superfund Project Manager (6SF-TR)
FROM:		ores, Alternate ESAT Regional Project Officer tal Services Branch (6MD-HL)
SUBJECT:	Contract Lal	poratory Program Data Review

The EPA Region 6 Environmental Services Branch ESAT data review team has completed a review of the submitted Contract Laboratory Program (CLP) data package for the referenced site. The samples analyzed and reviewed are detailed in the attached Regional data review report.

The data package is acceptable for regional use. Problems, if any, are listed in the report narrative. If you have any questions regarding the data review report, please contact me at (281) 983-2139.

STATLOC	\$0.0\$	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
OL METH	KS KS	<b>₩</b>
". FINV	Ø	LC LC
VIWAMS OJ	0 \$433	0.5279
VEL PERSO	82.3	** *** ***
SDG EPASAMP LABID MATRIX QCCODE ANDATE ANTIME CASNUM ANALYTE CONC VALDGAL UNITS ADJCRGL SMPDATE PRPDATE LEVEL PERSOLD SMPWIVL FINVOL METHOD STATLGC	0772072016 077772016 0772172016 Low	07/20/2016 07/26/2016 07/21/2016 Low
UNITS ADJORGE	mg/kg 0.56	ngkg 0.73
VALDGAL	Water	400g 
ANTIME CASNUM ANALYTE CONC	Field_Sample 07/28/2016 13.28:03.57.12.5 Cyanide 0.56	Fedd_Sample 07/27/2016 11 22 59 57-12-5 Cyande 0.11
ANDATE	e 07/28/2016 1	e 07/27/2016 1
qccobe	Field_Sample	Flerid Sample
MATRX	\$ \$	en 
CABIO	162033104	1626331011 S
EPASAM	48321 MF1D00 MF1D01 1620331002 S	48321 MF1D00 MF1D09
CASE SDG	2 2 2 2 2	21 MF1000
CAS	e 4	å

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION 6 HOUSTON BRANCH 10625 FALLSTONE RD. HOUSTON, TEXAS 77099

September 1, 2016

#### <u>MEMORANDUM</u>

SUBJECT		poratory Program Data Review
FROM:		ores, Alternate ESAT Regional Project Officer tal Services Branch (6MD-HL)
TO:	Bret Kendri	ck, Superfund Project Manager (6SF-TR)
	Site.	LANE PLATING WORKS
	Case#:	46321
	SDG#:	MF1D18

The EPA Region 6 Environmental Services Branch ESAT data review team has completed a review of the submitted Contract Laboratory Program (CLP) data package for the referenced site. The samples analyzed and reviewed are detailed in the attached Regional data review report.

The data package is acceptable for regional use. Problems, if any, are listed in the report narrative. If you have any questions regarding the data review report, please contact me at (281) 983-2139.

46321 MF 1D18 MF 1D13 1670467031 S	Field_Sample 07/27/2016 12:23:14 57-12-5 Cyanide 0.18	anide 0,18	J	mg/kg 0.73	07/21/2016 07/26/2016 07/22/2016 Low	68.9	0.505.0	Ø	A W	SE-06
46321 MF1D18 MF1D14 1620228004 S	Field_Sample 07/27/2016 12:20;14 57-12-5	Cyanide 0.73	= =	mg/kg 0.73	07/19/2016 07/26/2016 07/20/2016 Low	63.0	0.5376	ŭ	ASS	55.07
46321 MF1D18 MF1D15 1620467002 S	Field_Sample_07/27/2016 12,23,32,57-12-5	Cyanide 0.10	]	mg/kg 0.68	07/21/2016 07/28/2016 07/22/2016 Low	1.73	0.5548	ಟ	N S	SE-48
46321MF1D18 MF1D16 1620467003.5	Field_Sample 07/27/2016 12:24,26 57:12-5	Cyanide (,1	£.?	mg/kg 1.1	07/21/2016 07/26/2016 07/22/2016 Ltw	45.4	0 5028	43	Ø	SE-03
46321 MF 1D18 MF 1D17 1620228005 S	Field_Sample 07/27/2016 12:20 32 57-12-5	Cyanide 0.0	0.034	mg/kg 0.58	07/19/2016 07/26/2016 07/20/2016 Low	ជា សូស្ត	0.5104	W	≪ W	SE-10
46321 MF1D18 MF1D18 1620157001 S	Field_Sample 07/27/2016 12:12:08 57-12-5	Cyanide 0.35	12	mg/kg 0.59	07/18/2016 07/26/2016 07/19/2016 Low	76.5	0.5533	Ø	S.	÷ ម មា
46321 MF ID18 MF ID19 16201570M S	Field_Sample 07/27/2016 12:16:02 57*12-5	Cyanide 0.0	0.067	mg/kg 0.55	07/18/2016 07/25/2016 07/19/2016 Law	:57 \$10 \$2	0.5914	æ	S)	SE-12
46321 MF1D18 MF1D2D 1620157005 S	Field_Sample 07/27/2016 12:16:20 57:12-5	Cyanide 0.62	63	MB/NG 0.59	07/18/2016 07/26/2016 07/19/2016 Law	912	0.5897	120	S	5.13
46321 MF1D18 MF1D21 1620467004 S	Field_Sample 07/27/2016 12:24:44 57:12:5	Cyanide 0.7	0.74 U	mg/kg 074	07/21/2016 07/25/2016 07/22/2016 Low	85,4	0.5192	£3	A Si	56-14
46321 MF 1018 MF 1022 1620467005 S	Field_Sample 07/27/2016 12:27:26 57-12-5	Cyande 065	3	mg/kg 0.98	07/21/2016 07/25/2016 07/22/2016 Low	ći G	0.5518	KO	AS	58-45

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION 6 HOUSTON BRANCH 10625 FALLSTONE RD. HOUSTON, TEXAS 77099

September 2, 2016

MEMORAN	<u>iDUM</u>						
SUBJECT:	Contract Laboratory Program Data Review						
FROM:	Raymond Flores, Alternate ESAT Regional Project Officer Environmental Services Branch (6MD-HL)						
TO:	Bret Kendrick, Superfund Project Manager (6SF-TR)						
	Site: LANE PLATING WORKS						
	Case#:46321						

The EPA Region 6 Environmental Services Branch ESAT data review team has completed a review of the submitted Contract Laboratory Program (CLP) data package for the referenced site. The samples analyzed and reviewed are detailed in the attached Regional data review report.

MF1D37

The data package is acceptable for regional use. Problems, if any, are listed in the report narrative. If you have any questions regarding the data review report, please contact me at (281) 983-2139.

SWE	Sv4.07	80 % O	SP W.S	SV4-11	SW2.12	55 P. 143	SW.14	SW-15
is A	AS	£0	AS	S.	AS	2,4	S,	(7) 40
ග	123	(Ž)	ıβ	9	₩	ம	ක්	Ø
93	743	ø	ಭ	ij.	£	9	ឆ្ន	ಭ
0000	0.00	000	030	000	0.00	00.0	000	000
anterote overzote onzozote Low	07/19/2018 07/27/2018 07/70/2016 Low	OTENEDIS OTENEDIS OTENEDIS Law	OPEREDIS OPERADOS OPERADOS LOW	ofrezois oreneous oriseous Low	OTHERZOIS OTRINDIS OTHEROIS LOW	OTHEREDIS UTATIONS UTHERBY LOW	07/21/2015 07/27/2016 07/27/2016 Low	07/21/2016 07/27/2016 07/22/2016 Low
0,01	10.0	5	30.03	100	90	9	9	10.0
work.	480	lića	T Ca	ron	unt	4,63	uga	17871
ο	⊃	2	D	⋾	$\supset$	3	⊃	3
30.0	10.0	000	40.0	10.0	10.0	10.01	10.0	10.0
Field_Sample_07/28/2016_13-16:27_57.12-5_Cyande	Field_Sample 07/28/2016 13.17/21 57-12-5 Cyanda	Field_Sample 07/25/2016 13:21 30 57:12:5 Cyanida	Fied_ Sample 07/28/2016 11/21:51 57:12-5 Cyande	Field_Sample OTZBZO16 13 OB:15 57:12:5 Cyande	Field_Sample_07/20/2016 13, 13:10 57:12:5 Cyando	Fed. Sample 07/26/2018 13-13:27 57-12-5 Cyande	Field_Sample 07/28/2016 13:24:33 57-12-5 Cyande	Field_Sample 0728/2016 13.24-51 57: 12-5 Cyanda
1620230X92 VV	1620230003 W	1520458001 W	1820468052 W	16Z0159XX1 W	1620159004 W	1620159005 VV	1670488003 VV	1620455054 W
ASSTANTED TANDOL 162023X92 W	46321 MF 1D37 MF1D33	46321 MF 1037 MF 1034	45321 MF1D37 MF1D38	45321 NF1D37 NF1D37	46321 MF1D37 WF1D38	46321 MF1D37 MF1D39 1620159X25 VV	46321 NF 1037 NF 1048	46321 MF 1D37 MF 1D41

### INORGANIC DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the ESAT-Region 6 qualifiers assigned to results in the Data Summary Table.

- U Not detected at reported quantitation limit.
- L Reported concentration is between the MDL and the CRQL.
- J Result is estimated because of outlying quality control parameters such as matrix spike, serial dilution, etc., or the result is below the CRQL.
- R Result is unusable.
- F A possibility of a false negative exists.
- UC Reported concentration should be used as a raised quantitation limit because of blank effects and/or laboratory or field contamination.
- + High biased. Actual concentration may be lower than the concentration reported.
- Low biased. Actual concentration may be higher than the concentration reported.
- W The result should be used with caution. The result was reported on a dry weight basis although the sample did not conform to the EPA Office of Water definition of a soil sample because of its high water content (>70% moisture).

	1		

Bryan W. Shaw, Ph.D., P.E., *Chairman*Toby Baker, *Commissioner*Jon Niermann, *Commissioner*Richard A. Hyde, P.E., *Executive Director* 



### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 25, 2017

Attn: Lori Frauli Trulson City of Dallas, Office of Environmental Quality 1500 Marilla Street #7AN Dallas, TX 75201

Subject: Final Site Inspection Report – Lane Plating Works, Inc. (TCEQ ID: 4152-4744, EPA ID: TXN000605240/TXD007336571, RN100597707), 5322 Bonnie View Road, Dallas, Dallas County, Texas

Dear Ms. Trulson:

The Texas Commission on Environmental Quality (TCEQ) is enclosing one (1) CD of the final Environmental Protection Agency-funded Site Inspection Report for the Lane Plating Works, Inc. site located in Dallas, Texas. The Site Inspection Report was finalized on January 23, 2017. If you have any questions regarding this document, please call me at 512-239-2466, or email me at rebecca.storms@tceq.texas.gov.

Sincerely,

Rebecca Storms, P.G., Project Manager

Jeliera Ston

Superfund Section Remediation Division

RS/dl

Enclosure: CD (1): Site Inspection Report

cc: Brett Johnson, Parks and Recreation Department, Park Maintenance Services Division, 542 East Jefferson Boulevard, Dallas, TX 75203