



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

**1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202-2733**

November 9, 2018

CERTIFIED MAIL: RETURN RECEIPT REQUESTED: 7015 1520 0003 3990 7152

Rhonda Grisham
Environmental Consultant
ALX Industries LLC
2204 Catalina Dr.
Pasadena, Texas 77503

Re: EPA RCRA Compliance Evaluation Inspection – August 8, 2018; EPA ID# TXR000080711
– ALX Industries LLC – Pasadena, Texas

Dear Ms. Grisham,

On August 8, 2018, The United States Environmental Protection Agency (EPA) conducted an announced Compliance Evaluation Inspection (CEI) at the ALX Industries LLC Pasadena facility in Pasadena, Texas. I would like to thank you for the time and the courtesy you and your staff extended to our inspectors. Enclosed, please find a copy of the CEI Report which chronicles the inspection findings. A copy of this CEI Report will be transmitted separately to the Texas Commission on Environmental Quality (TCEQ).

Based on the information contained in the enclosed inspection report, there are areas of concern for which EPA may take enforcement action under the Resource Conservation and Recovery Act (RCRA). If you have not already done so, we encourage you to immediately address all compliance issues identified in the CEI Report.

If you have any questions regarding this matter, please contact Mr. Bill Mansfield of my staff at (214) 665-8321 or email to Mansfield.william@epa.gov.

Sincerely,

A handwritten signature in blue ink, which appears to read "Troy Stuckey", is written over the typed name.

Troy Stuckey
Chief
Waste Compliance III Section (6EN-H3)
Waste Enforcement Branch

Enclosure

cc: James Gradney, MPA
Manager, Waste Enforcement Section
Enforcement Division (MC-128)
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, TX 78711

Peter B. Abel
Waste Liaison
Program Support Section (MC-174)
Office of Compliance and Enforcement
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, TX 78711

**Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT**

Inspection Date(s):	08/14/2018		
Media:	RCRA		
Regulatory Program(s)	N/A		
Company Name:	ALX Industries		
Facility Name:	ALX Industries		
Facility Physical Location:	2204 Catalina Dr.		
(city, state, zip code)	Pasadena, TX, 77503		
Mailing address:	2204 Catalina Dr.		
(city, state, zip code)	Pasadena, TX, 77503		
County/Parish:	Harris		
Facility Contact:	Rhonda Grisham	Environmental Consultant	
	rhonda@alxindustries.com		
FRS Number:	110054869344		
Identification/Permit Number:	TXR000080711		
Media Number:	N/A		
NAICS:	331492		
SIC:	N/A		
Personnel participating in inspection:			
David Robertson	EPA / 6EN-H1	Lead Inspector	214-665-7363
Debra Pandak	EPA / 6EN-H2	Inspector	214-665-7565
Bill Mansfield	EPA / 6EN-H3	Inspector	214-665-8321
Brad Alexander	ALX Industries	President	832-767-2467
Zach Petch	ALX Industries	Co-Founder	832-767-2467
Rhonda Grisham	ALX Industries	Environmental Consultant	832-767-2467
Candi Stansbury	ALX Industries	Executive Assistant	832-767-2467
EPA Lead Inspector Signature/Date	<i>William Mansfield</i> For David Robertson David Robertson		11/08/18 Date
Supervisor Signature/Date	<i>Bob Stuckey</i> for Troy Stuckey		11-9-18 Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors David Robertson, Debra Pandak, and Bill Mansfield arrived at ALX Industries at 8:25 AM on 08/14/18 for an announced inspection. We met with Brad Alexander (President), Zach Petch (Co-Founder), Rhonda Grisham (Environmental Consultant), and Candi Stansbury (Executive Assistant). David Robertson presented his credentials to Brad Alexander and informed him that this was an EPA inspection to determine the facilities compliance with the Resource Conservation and Recovery Act (RCRA). The scope of the inspection is a full compliance evaluation (FCE) and includes evaluation of the facility's compliance with RCRA.

FACILITY DESCRIPTION

ALX Industries operates in a metal warehouse building at 2204 Catalina Dr. in Pasadena Texas. ALX employs approximately 5 people and operates during normal business hours from 8am to 5pm. ALX reclaims silver from photo chemicals and photo film.

Section II – OBSERVATIONS

During the facility walk through, I observed the following processes:

- 1) Primary silver reclamation that uses an electrolytic plating machine that sits on top of approximately 275-gallon totes to extract silver out of the fixer photochemical (Appendix 1, photos 1). Brad said that the fixer contains the majority of the silver and the developer usually contains little to no silver. Brad also said that human error is how the developer and fixer get mixed. This primary silver reclamation process is used only with the high concentration of silver found in the fixer. Test strips are used to determine the pH and silver concentration of the tote contents in turn to determine if primary reclamation is warranted. Zach demonstrated using the test strip as well as the copper pipe test in which a clean copper pipe is dipped into the contents of the tote, swirled around and then pulled out to see if silver is present on the pipe (Appendix 1, photos 8 - 12).
- 2) The secondary silver reclamation process is called peristaltic and involves pumping the contents of the totes through a 5-gallon bucket of steel wool where the silver reacts and chemically bonds to the steel wool (Appendix 1, photo 2). Later the steel wool is burned to reclaim the silver.
- 3) Storage area in neighboring unit. (Appendix 1, photos 6 & 7)

- 4) The final process I observed was the disposal process. After photo chemicals in the totes have completed the silver reclamation process, the totes are drained through a metered POTW discharge. ALX does have a permit for this discharge (Appendix 1, photo 4).
- 5) After lunch we returned to the facility at 1pm accompanied by an EPA Clean Water Act (CWA) inspector, Ken Aubuchon. Earlier in the day David Robertson had called Ken to discuss the operations at ALX on speaker phone with the facility representatives. Ken confirmed that ALX was operating as a Centralized Waste Treatment (CWT) facility and that the facility was regulated under the CWA.

Section III – AREAS OF CONCERN

- 1) Discharge permit limits have been exceeded according to documents obtained during the records review. Brad explained to us that ALX is unable to get the silver concentration low enough to meet the permit limits and that the City of Pasadena allowed them to exceed the permit level for silver because the city was below their total load limits of silver. ALX had additional over limit discharges for cadmium, chromium, and lead.
- 2) The facility appears to be operating a silver reclamation process without treatment to meet the silver concentration limits in their discharge permit.
- 3) During the inspection, EPA inspectors identified a tote that was unlabeled. ALX representatives informed EPA inspectors that the tote was a rejected load from a customer and after it arrived ALX noticed it had an oily sheen and promptly sent samples from the tote to be tested by a lab (Appendix 1, photo 5).

Section IV – FOLLOW UP

The following information was received by EPA after exiting the ALX on 08/14/18:

- Post inspection EPA received sample results from the rejected tote. These results can be found in the appendices of this report.
- EPA also received sample results from ALX that demonstrate their silver reclamation process efficiency. These results can be found in the appendices of this report.

Section V – LIST OF APPENDICES

Appendix 1 – Photograph Log
Appendix 2 – Sample results from reclamation process
Appendix 3 – Sample results from rejected totes

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P810001.jpg

Date of Photo: August 14, 2018

Time: 10:49 am

Photographer: Debra Pandak, EPA Inspector

Description: Totes undergoing silver recovery using "secondary – peristaltic" process.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 2

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P8140002.jpg

Date of Photo: August 14, 2018 Time: 10:49 am

Photographer: Debra Pandak, EPA Inspector

Description: Totes undergoing silver recovery using electrolysis process.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 3

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P8140003.jpg

Date of Photo: August 14, 2018

Time: 10:50 am

Photographer: Debra Pandak, EPA Inspector

Description:



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P8140004.jpg

Date of Photo: August 14, 2018

Time: 10:52 am

Photographer: Debra Pandak, EPA Inspector

Description: Discharge point for liquid waste into city POTW.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 5

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P8140005.jpg

Date of Photo: August 14, 2018

Time: 10:53 am

Photographer: Debra Pandak, EPA Inspector

Description: Tote set aside from totes undergoing silver recovery. Tote suspected of being hazardous. ALX has sent samples to a laboratory for waste characterization.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P8140006.jpg

Date of Photo: August 14, 2018

Time: 10:59 am

Photographer: Debra Pandak, EPA Inspector

Description: Materials in storage waiting to be processed for silver recovery. Materials are located in a different warehouse address: 2212 Catalina. Materials in storage include film and photo developing solutions, approximately 48 totes.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 7

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P8140007.jpg

Date of Photo: August 14, 2018

Time: 10:59 am

Photographer: Debra Pandak, EPA Inspector

Description: Materials in storage waiting to be processed for silver recovery. Materials are located in a different warehouse address: 2212 Catalina. Materials in storage include film and photo developing solutions, approximately 48 totes.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 8

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P8140008

Date of Photo: August 14, 2018 Time: 2:24 pm

Photographer: Debra Pandak, EPA Inspector

Description: Demonstration of copper pipe test on tote waiting to be discharged to city industrial POTW.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P81400109.jpg

Date of Photo: August 14, 2018

Time: 2:24 pm

Photographer: Debra Pandak, EPA Inspector

Description: Demonstration of copper pipe test on tote waiting to be discharged to city industrial POTW.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 10

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P8140010.jpg

Date of Photo: August 14, 2018

Time: 2:24 pm

Photographer: Debra Pandak, EPA Inspector

Description: Demonstration of copper pipe test on tote waiting to be discharged to city industrial POTW.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 11

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P8140011.jpg

Date of Photo: August 14, 2018

Time: 2:25 pm

Photographer: Debra Pandak, EPA Inspector

Description: Demonstration of copper pipe test on tote waiting to be processed for silver recovery.
Demonstration shows silver in the fluid attaching to the copper pipe.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 12

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P8140012.jpg

Date of Photo: August 14, 2018

Time: 2:25 pm

Photographer: Debra Pandak, EPA Inspector

Description: Demonstration of copper pipe test on tote waiting to be processed for silver recovery. Demonstration shows silver in the fluid attaching to the copper pipe.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 13

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas



Photo File Name: P8140013.jpg

Date of Photo: August 14, 2018 Time: 2:27 pm

Photographer: Debra Pandak, EPA Inspector

Description: Imaging plates in storage.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: ALX Industries LLC. 2204 Catalina Drive		
City: Pasadena	County/Parish: Harris	State: Texas

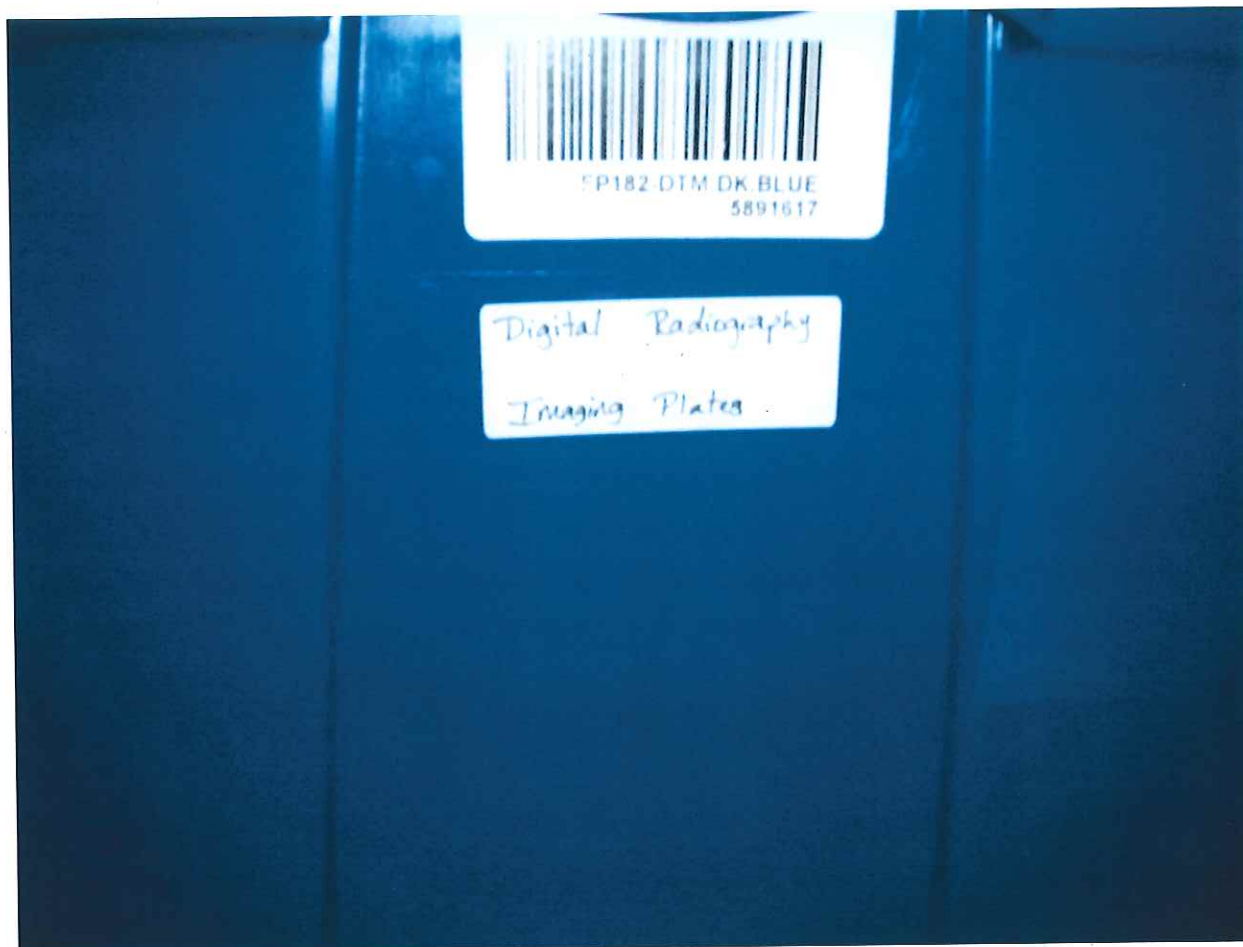


Photo File Name: P8140014.jpg

Date of Photo: August 14, 2018

Time: 2:28 pm

Photographer: Debra Pandak, EPA Inspector

Description: Labels on bin of imaging plates. Photos 15 and 16 are duplicates and not included in photo log due to poor quality.

Appendix 2

Sample results from reclamation process



10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

September 10, 2018

Rhonda Storey
ALX Industries
2204 Catalina Drive
Pasadena, TX 77503

Work Order: **HS18090135**

Laboratory Results for: **ALX Industries Internal**

Dear Rhonda,

ALS Environmental received 3 sample(s) on Sep 05, 2018 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

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

Sincerely,

Generated By: BERNADETTE.FINI
Bernadette A. Fini
Project Manager

Client: ALX Industries
Project: ALX Industries Internal
Work Order: HS18090135

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS18090135-01	Fixer prior to silver recovery	Liquid		22-Aug-2018 14:15	05-Sep-2018 13:33	☐
HS18090135-02	Fixer after electrolytic	Liquid		31-Aug-2018 12:00	05-Sep-2018 13:33	☐
HS18090135-03	Fixer after Parastolic	Liquid		04-Sep-2018 08:30	05-Sep-2018 13:33	☐

Client: ALX Industries
Project: ALX Industries Internal
Work Order: HS18090135

CASE NARRATIVE

Metals by Method SW6020

Batch ID: 132218

Sample ID: Fixer after Parastolic (HS18090135-03)

- Sample ran at a 10x due to sample viscosity. High Sodium concentration.

Client: ALX Industries
Project: ALX Industries Internal
Sample ID: Fixer prior to silver recovery
Collection Date: 22-Aug-2018 14:15

ANALYTICAL REPORT

WorkOrder: HS18090135
Lab ID: HS18090135-01
Matrix: Liquid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method: SW6020			Prep: SW3010A / 06-Sep-2018	Analyst: JDE
Silver	25.7		0.200	mg/L	100	10-Sep-2018 15:33

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

Client: ALX Industries
Project: ALX Industries Internal
Sample ID: Fixer after electrolytic
Collection Date: 31-Aug-2018 12:00

ANALYTICAL REPORT
WorkOrder: HS18090135
Lab ID: HS18090135-02
Matrix: Liquid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method: SW6020			Prep: SW3010A / 06-Sep-2018	Analyst: JDE
Silver	24.4		0.200	mg/L	100	10-Sep-2018 15:35

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

Client: ALX Industries
Project: ALX Industries Internal
Sample ID: Fixer after Parastolic
Collection Date: 04-Sep-2018 08:30

ANALYTICAL REPORT

WorkOrder: HS18090135
Lab ID: HS18090135-03
Matrix: Liquid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method: SW6020			Prep: SW3010A / 06-Sep-2018	Analyst: JDE
Silver	0.335		0.0200	mg/L	10	10-Sep-2018 15:37

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

WEIGHT LOG

Client: ALX Industries
Project: ALX Industries Internal
WorkOrder: HS18090135

Batch ID: 132218 Method: ICP-MS METALS BY SW6020A Prep: 3010A

SampleID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS18090135-01	1	10	10 (mL)	1
HS18090135-02	1	10	10 (mL)	1
HS18090135-03	1	10	10 (mL)	1

Client: ALX Industries
Project: ALX Industries Internal
WorkOrder: HS18090135

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID 132218	Test Name : ICP-MS METALS BY SW6020A			Matrix: Liquid		
HS18090135-01	Fixer prior to silver recovery	22 Aug 2018 14:15		06 Sep 2018 13:30	10 Sep 2018 15:33	100
HS18090135-02	Fixer after electrolytic	31 Aug 2018 12:00		06 Sep 2018 13:30	10 Sep 2018 15:35	100
HS18090135-03	Fixer after Parastolic	04 Sep 2018 08:30		06 Sep 2018 13:30	10 Sep 2018 15:37	10

Client: ALX Industries
 Project: ALX Industries Internal
 WorkOrder: HS18090135

QC BATCH REPORT

Batch ID: 132218		Instrument: ICPMS04		Method: SW6020						
MBLK	Sample ID: MBLK-132218	Units: mg/L			Analysis Date: 07-Sep-2018 16:36					
Client ID:		Run ID: ICPMS04_323045	SeqNo: 4719472		PrepDate: 06-Sep-2018		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Silver	ND	0.00200								
LCS	Sample ID: LCS-132218	Units: mg/L			Analysis Date: 07-Sep-2018 16:38					
Client ID:		Run ID: ICPMS04_323045	SeqNo: 4719473		PrepDate: 06-Sep-2018		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Silver	0.04588	0.00200	0.05	0	91.8	80 - 120				
MS	Sample ID: HS18081553-11MS	Units: mg/L			Analysis Date: 07-Sep-2018 18:39					
Client ID:		Run ID: ICPMS04_323045	SeqNo: 4719756		PrepDate: 06-Sep-2018		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Silver	0.05001	0.00200	0.05	0.000012	100.0	80 - 120				
MSD	Sample ID: HS18081553-11MSD	Units: mg/L			Analysis Date: 07-Sep-2018 18:41					
Client ID:		Run ID: ICPMS04_323045	SeqNo: 4719757		PrepDate: 06-Sep-2018		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Silver	0.04771	0.00200	0.05	0.000012	95.4	80 - 120	0.05001	4.71	20	
PDS	Sample ID: HS18081553-11PDS	Units: mg/L			Analysis Date: 07-Sep-2018 18:43					
Client ID:		Run ID: ICPMS04_323045	SeqNo: 4719758		PrepDate: 06-Sep-2018		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Silver	0.09644	0.00200	0.1	0.000012	96.4	75 - 125				
SD	Sample ID: HS18081553-11SD	Units: mg/L			Analysis Date: 07-Sep-2018 18:37					
Client ID:		Run ID: ICPMS04_323045	SeqNo: 4719755		PrepDate: 06-Sep-2018		DF: 5			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	RPD Limit	Qual
Silver	ND	0.0100					0.000012	0	10	
The following samples were analyzed in this batch: HS18090135-01 HS18090135-02 HS18090135-03										

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

Client: ALX Industries
Project: ALX Industries Internal
WorkOrder: HS18090135

**QUALIFIERS,
ACRONYMS, UNITS**

<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 detected below quantitation limit
M	Manually integrated, see raw data for justification
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/SDL

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS, ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
North Carolina	624-2018	31-Dec-2018
Arkansas	88-0356	27-Mar-2019
Texas	T10470231-18-21	30-Apr-2019
North Dakota	R193 2018-2019	30-Apr-2019
Illinois	004438	29-Jun-2019
Louisiana	03087	30-Jun-2019
Dept of Defense	L2231 Rev 3-30-2018	22-Dec-2018
Kentucky	123043 - 2018	30-Apr-2019
Kansas	E-10352 2018-2019	31-Jul-2019
Oklahoma	2018-156	31-Aug-2019

Date: 10-Sep-18

Sample Receipt Checklist

Client Name: ALX-Pasadena
Work Order: HS18090135

Date/Time Received: 05-Sep-2018 13:33
Received by: PS

Checklist completed by: Nilesh D. Ranchod 5-Sep-2018
eSignature Date

Reviewed by: Bernadette A. Fini 6-Sep-2018
eSignature Date

Matrices: LiquidCarrier name: ALS Courier

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☒	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
TX1005 solids received in hermetically sealed vials?	Yes ☐	No ☐	N/A ☒
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	1.4C / 1.0C UC/C		IR # 11
Cooler(s)/Kil(s):	25126		
Date/Time sample(s) sent to storage:	09/05/2018 5:30PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☒	N/A ☐
pH adjusted?	Yes ☒	No ☐	N/A ☐
pH adjusted by:	Si Ma		

Login Notes: Sx Date & Time Differ. Sample 1 COC= 08/22/2018 2:15pm Label= 09/05/2018 08:46am. Sample 2 COC=08/31/2018 12:00pm Label=09/5/2018 8:49am. Sample 3 COC= 9/4/2018 08:30am Label =09/05/2018 08:52am. pH>2 preserved with 0.25ml HNO3 on 9/5/18 2:15pm by sima

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

Corrective Action:



Cincinnati, OH
+1 513 733 5336
Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 450 1511
Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 1 of 1

HS18090135

ALX Industries
ALX Industries Internal



COC ID: 173459

ALS Project Manager:

Customer Information				Project Information													
Purchase Order		Project Name	ALX Industries	A	Total Silver												
Work Order		Project Number	Internal	B													
Company Name	ALX Industries	Bill To Company	ALX Industries	C													
Send Report To	Rhonda Storey	Invoice Attn	Rhonda Storey	D													
Address	2204 Catalina Drive	Address	2204 Catalina Drive	E													
City/State/Zip	Pasadena, TX 77503	City/State/Zip	Pasadena TX 77503	F													
Phone	(832) -76-7-24	Phone	(832) -76-7-24	G													
Fax		Fax		H													
e-Mail Address	rhonda@alxindustries.com	e-Mail Address	rhonda@alxindustries.com	I													
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Fixer prior to silver recovery	8/22/2018	2:15 PM	Liquid PHM03		1	X										
2	Fixer after electrolytic	8/31/2018	12:00 PM	Liquid PHM03		1	X										
3	Fixer after Parastolic	9/4/2018	8:30 AM	Liquid PHM03		1	X										
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
TAC Petach				☒ 7 3 Day		5/18/2018 3:00 PM	
Requisitioned by: <i>Donna L. Johnson</i>		Resolved by: <i>Donna L. Johnson</i>		☐ 5 Wk Days			
Requisitioned by: <i>Donna L. Johnson</i>		Resolved by: <i>Donna L. Johnson</i>		☐ 10 Wk Days			
Issued by (Laboratory): <i>Donna L. Johnson</i>		Checked by (Laboratory): <i>Donna L. Johnson</i>		Notes: ALX Base Pricing			
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 9-5035		Cooler ID: 25126		Cooler Temp: 11.4		QC Package: (Check One Box Below)	
						☒ Level II Std OC	
						☐ Level III Std OC/Row Date	
						☐ Level IV SW648/CLP	

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

Appendix 3

Sample results from rejected totes



10450 Standcliff Rd. Suite 210
Houston, TX 77099
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F: +1 281 530 5887

February 21, 2018

Rhonda Storey
ALX Industries
2204 Catalina Drive
Pasadena, TX 77503

Work Order: **HS18020883**

Laboratory Results for: **Intertek AIM Morgan City Commingled**

Dear Rhonda,

ALS Environmental received 2 sample(s) on Feb 16, 2018 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

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

Sincerely,

Generated By: Jumoke Lawal
Bernadette A. Fini
Project Manager

Client: ALX Industries
Project: Intertek AIM Morgan City Commingled
Work Order: HS18020883

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS18020883-01	Commingled SPC Tote Top Phase	Product		08-Feb-2018 08:20	16-Feb-2018 12:02	☐
HS18020883-02	Commingled SPC Tote Bottom Phase	Liquid		08-Feb-2018 08:20	16-Feb-2018 12:02	☐

Client: ALX Industries
Project: Intertek AIM Morgan City Commingled
Work Order: HS18020883

CASE NARRATIVE**Work Order Comments**

- Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.
- The temperature at the time of pH is reported. Please note that all pH results are already normalized to a temperature of 25 °C.

GCMS Volatiles by Method SW8260**Batch ID: R311250****Sample ID: Commingled SPC Tote Bottom Phase (HS18020883-02)**

- Sample holding time expired prior to sample receipt. It was analyzed at the request of the client. Results should be considered estimated.

Batch ID: R311132

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Metals by Method SW7470**Batch ID: 125458**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Metals by Method SW1311/6020**Batch ID: 125399****Sample ID: Commingled SPC Tote Bottom Phase (HS18020883-02)**

- Sample ran at a 5x due to sample viscosity.

Sample ID: Commingled SPC Tote Top Phase (HS18020883-01)

- Sample ran at a 5x due to sample viscosity.

WetChemistry by Method SW7.3.3.2**Batch ID: R311272**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW1010**Batch ID: R311279**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW7.3.4.2**Batch ID: R311268**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SM4500H+ B**Batch ID: R311105**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 Sample ID: Commingled SPC Tote Top Phase
 Collection Date: 08-Feb-2018 08:20

ANALYTICAL REPORT

WorkOrder: HS18020883
 Lab ID: HS18020883-01
 Matrix: Product

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method: SW8260		Analyst: WLR		
Benzene	520,000		240000	ug/Kg	50000	20-Feb-2018 11:35
Ethylbenzene	2,700,000		240000	ug/Kg	50000	20-Feb-2018 11:35
m,p-Xylene	9,700,000		490000	ug/Kg	50000	20-Feb-2018 11:35
o-Xylene	4,300,000		240000	ug/Kg	50000	20-Feb-2018 11:35
Toluene	8,300,000		240000	ug/Kg	50000	20-Feb-2018 11:35
Xylenes, Total	14,000,000		240000	ug/Kg	50000	20-Feb-2018 11:35
Surr: 1,2-Dichloroethane-d4	102		70-126	%REC	50000	20-Feb-2018 11:35
Surr: 4-Bromofluorobenzene	103		73-120	%REC	50000	20-Feb-2018 11:35
Surr: Dibromofluoromethane	95.2		70-130	%REC	50000	20-Feb-2018 11:35
Surr: Toluene-d8	94.9		82-121	%REC	50000	20-Feb-2018 11:35
TCLP METALS BY SW6020A		Method: SW1311/6020	Leache: SW1311 / 19-Feb-2018	Prep: SW3010A / 19-Feb-2018	Analyst: JDE	
Arsenic	ND		0.250	mg/L	5	20-Feb-2018 13:31
Barium	ND		1.00	mg/L	5	20-Feb-2018 13:31
Cadmium	ND		0.250	mg/L	5	20-Feb-2018 13:31
Chromium	ND		0.250	mg/L	5	20-Feb-2018 13:31
Lead	ND		0.250	mg/L	5	20-Feb-2018 13:31
Selenium	ND		0.250	mg/L	5	20-Feb-2018 13:31
Silver	ND		0.250	mg/L	5	20-Feb-2018 13:31
TCLP MERCURY BY SW7470A		Method: SW7470	Leache: SW1311 / 19-Feb-2018	Prep: SW7470 / 20-Feb-2018	Analyst: JBA	
Mercury	ND		0.00200	mg/L	1	20-Feb-2018 13:04
PH BY SM4500H+ B		Method: SM4500H+ B	Analyst: MZD			
pH	7.00	H	0.100	pH Units	1	19-Feb-2018 17:27
Temp Deg C @pH	22.7	H	0	°C	1	19-Feb-2018 17:27
FLASH POINT BY PENSKY-MARTENS SW1010A		Method: SW1010	Analyst: KAH			
Ignitability	70.6		70.0	°F	1	21-Feb-2018 14:30
REACTIVE CYANIDE		Method: SW7.3.3.2	Prep: SW7.3.3.2	Analyst: MZD		
Reactive Cyanide	ND	n	100	mg/Kg	1	21-Feb-2018 15:58
REACTIVE SULFIDE		Method: SW7.3.4.2	Analyst: MZD			
Reactive Sulfide	ND	n	100	mg/Kg	1	21-Feb-2018 15:50

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

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 Sample ID: Commingled SPC Tote Bottom Phase
 Collection Date: 08-Feb-2018 08:20

ANALYTICAL REPORT

WorkOrder: HS18020883
 Lab ID: HS18020883-02
 Matrix: Liquid

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C Method: SW8260 Analyst: PC						
Benzene	3.4	H	2.5	mg/L	500	21-Feb-2018 04:13
Ethylbenzene	4.1	H	2.5	mg/L	500	21-Feb-2018 04:13
m,p-Xylene	15	H	5.0	mg/L	500	21-Feb-2018 04:13
o-Xylene	6.7	H	2.5	mg/L	500	21-Feb-2018 04:13
Toluene	20	H	2.5	mg/L	500	21-Feb-2018 04:13
Xylenes, Total	22	H	2.5	mg/L	500	21-Feb-2018 04:13
Surr: 1,2-Dichloroethane-d4	101		70-126	%REC	500	21-Feb-2018 04:13
Surr: 4-Bromofluorobenzene	92.0		82-124	%REC	500	21-Feb-2018 04:13
Surr: Dibromofluoromethane	100		77-123	%REC	500	21-Feb-2018 04:13
Surr: Toluene-d8	104		82-127	%REC	500	21-Feb-2018 04:13
TCLP METALS BY SW6020A Method: SW1311/6020 Leache: SW1311 / 19-Feb-2018 Prep: SW3010A / 19-Feb-2018 Analyst: JDE						
Arsenic	ND		0.250	mg/L	5	20-Feb-2018 13:37
Barium	ND		1.00	mg/L	5	20-Feb-2018 13:37
Cadmium	ND		0.250	mg/L	5	20-Feb-2018 13:37
Chromium	ND		0.250	mg/L	5	20-Feb-2018 13:37
Lead	2.76		0.250	mg/L	5	20-Feb-2018 13:37
Selenium	1.01		0.250	mg/L	5	20-Feb-2018 13:37
Silver	0.734		0.250	mg/L	5	20-Feb-2018 13:37
TCLP MERCURY BY SW7470A Method: SW7470 Leache: SW1311 / 19-Feb-2018 Prep: SW7470 / 20-Feb-2018 Analyst: JBA						
Mercury	ND		0.00200	mg/L	1	20-Feb-2018 13:06
PH BY SM4500H+ B Method: SM4500H+ B Analyst: MZD						
pH	9.83	H	0.100	pH Units	1	19-Feb-2018 17:27
Temp Deg C @pH	22.7	H	0	°C	1	19-Feb-2018 17:27
FLASH POINT BY PENSKY-MARTENS Method: SW1010 Analyst: KAH						
SW1010A						
Ignitability	> 212		70.0	°F	1	21-Feb-2018 14:30
REACTIVE CYANIDE Method: SW7.3.3.2 Prep: SW7.3.3.2 Analyst: MZD						
Reactive Cyanide	ND	n	100	mg/Kg	1	21-Feb-2018 15:58
REACTIVE SULFIDE Method: SW7.3.4.2 Analyst: MZD						
Reactive Sulfide	ND	n	100	mg/Kg	1	21-Feb-2018 15:50

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

WEIGHT LOG

Client: ALX Industries
Project: Intertek AIM Morgan City Commingled
WorkOrder: HS18020883

Batch ID: 2300 Method: VOLATILES BY SW8260C

SampleID	Container	Sample Wt/Vol	Final Volume	Weight Factor	Container Type
HS18020883-01	1	5.105 (g)	5 (mL)	0.98	Bulk (5030B)

Batch ID: 125399 Method: TCLP METALS BY SW6020A Prep: 3010A_TCLP

SampleID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS18020883-01	1	1	10 (mL)	10
HS18020883-02	1	1	10 (mL)	10

Batch ID: 125458 Method: TCLP MERCURY BY SW7470A Prep: 1311_HGPR

SampleID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS18020883-01	1	1	10 (mL)	10
HS18020883-02	1	1	10 (mL)	10

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 WorkOrder: HS18020883

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID 125399 Test Name : TCLP METALS BY SW6020A Matrix: Liquid						
HS18020883-02	Commingled SPC Tote Bottom Phase	08 Feb 2018 08:20	19 Feb 2018 06:30	19 Feb 2018 11:40	20 Feb 2018 13:37	5
Batch ID 125399 Test Name : TCLP METALS BY SW6020A Matrix: Product						
HS18020883-01	Commingled SPC Tote Top Phase	08 Feb 2018 08:20	19 Feb 2018 06:30	19 Feb 2018 11:40	20 Feb 2018 13:31	5
Batch ID 125458 Test Name : TCLP MERCURY BY SW7470A Matrix: Liquid						
HS18020883-02	Commingled SPC Tote Bottom Phase	08 Feb 2018 08:20	19 Feb 2018 06:30	20 Feb 2018 08:00	20 Feb 2018 13:06	1
Batch ID 125458 Test Name : TCLP MERCURY BY SW7470A Matrix: Product						
HS18020883-01	Commingled SPC Tote Top Phase	08 Feb 2018 08:20	19 Feb 2018 06:30	20 Feb 2018 08:00	20 Feb 2018 13:04	1
Batch ID R311105 Test Name : PH BY SM4500H+ B Matrix: Liquid						
HS18020883-02	Commingled SPC Tote Bottom Phase	08 Feb 2018 08:20			19 Feb 2018 17:27	1
Batch ID R311105 Test Name : PH BY SM4500H+ B Matrix: Product						
HS18020883-01	Commingled SPC Tote Top Phase	08 Feb 2018 08:20			19 Feb 2018 17:27	1
Batch ID R311132 Test Name : VOLATILES BY SW8260C Matrix: Product						
HS18020883-01	Commingled SPC Tote Top Phase	08 Feb 2018 08:20			20 Feb 2018 11:35	5000 0
Batch ID R311250 Test Name : VOLATILES - SW8260C Matrix: Liquid						
HS18020883-02	Commingled SPC Tote Bottom Phase	08 Feb 2018 08:20			21 Feb 2018 04:13	500
Batch ID R311268 Test Name : REACTIVE SULFIDE Matrix: Liquid						
HS18020883-02	Commingled SPC Tote Bottom Phase	08 Feb 2018 08:20			21 Feb 2018 15:50	1
Batch ID R311268 Test Name : REACTIVE SULFIDE Matrix: Product						
HS18020883-01	Commingled SPC Tote Top Phase	08 Feb 2018 08:20			21 Feb 2018 15:50	1
Batch ID R311272 Test Name : REACTIVE CYANIDE Matrix: Liquid						
HS18020883-02	Commingled SPC Tote Bottom Phase	08 Feb 2018 08:20			21 Feb 2018 15:58	1
Batch ID R311272 Test Name : REACTIVE CYANIDE Matrix: Product						
HS18020883-01	Commingled SPC Tote Top Phase	08 Feb 2018 08:20			21 Feb 2018 15:58	1
Batch ID R311279 Test Name : FLASH POINT BY PENSKEY-MARTENS SW1010A Matrix: Liquid						
HS18020883-02	Commingled SPC Tote Bottom Phase	08 Feb 2018 08:20			21 Feb 2018 14:30	1
Batch ID R311279 Test Name : FLASH POINT BY PENSKEY-MARTENS SW1010A Matrix: Product						
HS18020883-01	Commingled SPC Tote Top Phase	08 Feb 2018 08:20			21 Feb 2018 14:30	1

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: 125399 Instrument: ICPMS05 Method: SW1311/6020

MBLK	Sample ID: MBLKT2-125399	Units: mg/L	Analysis Date: 20-Feb-2018 12:27						
Client ID:	Run ID: ICPMS05_311139	SeqNo: 4443007	PrepDate: 19-Feb-2018	DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	ND	0.0500							
Barium	ND	0.200							
Cadmium	ND	0.0500							
Chromium	ND	0.0500							
Lead	ND	0.0500							
Selenium	ND	0.0500							
Silver	ND	0.0500							

MBLK

Sample ID: MBLKT1-125399

Units: mg/L

Analysis Date: 20-Feb-2018 12:25

Client ID:

Run ID: ICPMS05_311139

SeqNo: 4443006

PrepDate: 19-Feb-2018

DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	ND	0.0500							
Barium	ND	0.200							
Cadmium	ND	0.0500							
Chromium	ND	0.0500							
Lead	ND	0.0500							
Selenium	ND	0.0500							
Silver	ND	0.0500							

MBLK

Sample ID: MBLK-125399

Units: mg/L

Analysis Date: 20-Feb-2018 12:29

Client ID:

Run ID: ICPMS05_311139

SeqNo: 4443008

PrepDate: 19-Feb-2018

DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.00500								
Barium	ND	0.0200								
Cadmium	ND	0.00500								
Chromium	ND	0.00500								
Lead	ND	0.00500								
Selenium	ND	0.00500								
Silver	ND	0.00500								

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

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: 125399 Instrument: ICPMS05 Method: SW1311/6020

LCS		Sample ID: LCS-125399			Units: mg/L		Analysis Date: 20-Feb-2018 12:31			
Client ID:		Run ID: ICPMS05_311139			SeqNo: 4443009		PrepDate: 19-Feb-2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04947	0.00500	0.05	0	98.9	80 - 120				
Barium	0.04982	0.0200	0.05	0	99.6	80 - 120				
Cadmium	0.04919	0.00500	0.05	0	98.4	80 - 120				
Chromium	0.04959	0.00500	0.05	0	99.2	80 - 120				
Lead	0.05502	0.00500	0.05	0	110	80 - 120				
Selenium	0.04786	0.00500	0.05	0	95.7	80 - 120				
Silver	0.05092	0.00500	0.05	0	102	80 - 120				

MS		Sample ID: HS18020846-01MS			Units: mg/L		Analysis Date: 20-Feb-2018 12:39			
Client ID:		Run ID: ICPMS05_311139			SeqNo: 4443013		PrepDate: 19-Feb-2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.5116	0.0500	0.5	0.00581	101	80 - 120				
Barium	1.886	0.200	0.5	1.386	100	80 - 120				
Cadmium	0.5011	0.0500	0.5	0.01825	96.6	80 - 120				
Chromium	0.4922	0.0500	0.5	0.00011	98.4	80 - 120				
Lead	0.7318	0.0500	0.5	0.216	103	80 - 120				
Selenium	0.5019	0.0500	0.5	0.00552	99.3	80 - 120				
Silver	0.4796	0.0500	0.5	0.00017	95.9	80 - 120				

MSD		Sample ID: HS18020846-01MSD			Units: mg/L		Analysis Date: 20-Feb-2018 12:41			
Client ID:		Run ID: ICPMS05_311139			SeqNo: 4443014		PrepDate: 19-Feb-2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4764	0.0500	0.5	0.00581	94.1	80 - 120	0.5116	7.13	20	
Barium	1.926	0.200	0.5	1.386	108	80 - 120	1.886	2.11	20	
Cadmium	0.5015	0.0500	0.5	0.01825	96.6	80 - 120	0.5011	0.0698	20	
Chromium	0.4839	0.0500	0.5	0.00011	96.8	80 - 120	0.4922	1.7	20	
Lead	0.733	0.0500	0.5	0.216	103	80 - 120	0.7318	0.161	20	
Selenium	0.5084	0.0500	0.5	0.00552	101	80 - 120	0.5019	1.29	20	
Silver	0.4943	0.0500	0.5	0.00017	98.8	80 - 120	0.4796	3.02	20	

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

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: 125399		Instrument: ICPMS05		Method: SW1311/6020						
PDS		Sample ID: HS18020846-01PDS		Units: mg/L		Analysis Date: 20-Feb-2018 12:43				
Client ID:		Run ID: ICPMS05_311139		SeqNo: 4443015		PrepDate: 19-Feb-2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	Limit	Qual
Arsenic	0.9512	0.0500	1	0.00581	94.5	75 - 125				
Barium	2.311	0.200	1	1.386	92.5	75 - 125				
Cadmium	0.9627	0.0500	1	0.01825	94.4	75 - 125				
Chromium	0.9427	0.0500	1	0.00011	94.3	75 - 125				
Lead	1.213	0.0500	1	0.216	99.7	75 - 125				
Selenium	0.958	0.0500	1	0.00552	95.2	75 - 125				
Silver	0.903	0.0500	1	0.00017	90.3	75 - 125				

SD		Sample ID: HS18020846-01SD		Units: mg/L		Analysis Date: 20-Feb-2018 12:37				
Client ID:		Run ID: ICPMS05_311139		SeqNo: 4443012		PrepDate: 19-Feb-2018		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	Limit	Qual
Arsenic	ND	0.250					0.00581	0	10	
Barium	1.378	1.00					1.386	0.545	10	
Cadmium	0.02317	0.250					0.01825	0	10	
Chromium	ND	0.250					0.00011	0	10	
Lead	0.2125	0.250					0.216	0	10	
Selenium	ND	0.250					0.00552	0	10	
Silver	ND	0.250					0.00017	0	10	

The following samples were analyzed in this batch: HS18020883-01 HS18020883-02

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

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: 125458 Instrument: HG03 Method: SW7470

MBLK	Sample ID: GBLKT3-125458	Units: mg/L	Analysis Date: 20-Feb-2018 12:21
Client ID:	Run ID: HG03_311134	SeqNo: 4442753	PrepDate: 20-Feb-2018 DF: 1
Analyte	Result	PQL	SPK Val
		SPK Ref Value	%REC
		Control Limit	RPD Ref Value
			%RPD
			RPD Limit Qual

Mercury ND 0.000200

MBLK	Sample ID: MBLK-125458	Units: mg/L	Analysis Date: 20-Feb-2018 12:22
Client ID:	Run ID: HG03_311134	SeqNo: 4442754	PrepDate: 20-Feb-2018 DF: 1
Analyte	Result	PQL	SPK Val
		SPK Ref Value	%REC
		Control Limit	RPD Ref Value
			%RPD
			RPD Limit Qual

Mercury ND 0.000200

MBLK	Sample ID: GBLKT2-125458	Units: mg/L	Analysis Date: 20-Feb-2018 12:19
Client ID:	Run ID: HG03_311134	SeqNo: 4442752	PrepDate: 20-Feb-2018 DF: 1
Analyte	Result	PQL	SPK Val
		SPK Ref Value	%REC
		Control Limit	RPD Ref Value
			%RPD
			RPD Limit Qual

Mercury ND 0.000200

MBLK	Sample ID: GBLKT1-125458	Units: mg/L	Analysis Date: 20-Feb-2018 12:17
Client ID:	Run ID: HG03_311134	SeqNo: 4442751	PrepDate: 20-Feb-2018 DF: 1
Analyte	Result	PQL	SPK Val
		SPK Ref Value	%REC
		Control Limit	RPD Ref Value
			%RPD
			RPD Limit Qual

Mercury ND 0.000200

LCS	Sample ID: LCS-125458	Units: mg/L	Analysis Date: 20-Feb-2018 12:24
Client ID:	Run ID: HG03_311134	SeqNo: 4442755	PrepDate: 20-Feb-2018 DF: 1
Analyte	Result	PQL	SPK Val
		SPK Ref Value	%REC
		Control Limit	RPD Ref Value
			%RPD
			RPD Limit Qual

Mercury 0.00464 0.000200 0.005 0 92.8 80 - 120

MS	Sample ID: HS18020794-01MS	Units: mg/L	Analysis Date: 20-Feb-2018 12:28
Client ID:	Run ID: HG03_311134	SeqNo: 4442757	PrepDate: 20-Feb-2018 DF: 1
Analyte	Result	PQL	SPK Val
		SPK Ref Value	%REC
		Control Limit	RPD Ref Value
			%RPD
			RPD Limit Qual

Mercury 0.00494 0.000200 0.005 -0.000016 99.1 75 - 125

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

Client: ALX Industries
Project: Intertek AIM Morgan City Commingled
WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: 125458 Instrument: HG03 Method: SW7470

MSD	Sample ID: HS18020794-01MSD			Units: mg/L		Analysis Date: 20-Feb-2018 12:29			
Client ID:	Run ID: HG03_311134			SeqNo: 4442758		PrepDate: 20-Feb-2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Mercury	0.00492	0.000200	0.005	-0.000016	98.7	75 - 125	0.00494	0.406	20

The following samples were analyzed in this batch: HS18020883-01 HS18020883-02

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

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: R311132 Instrument: VOA8 Method: SW8260

MBLK	Sample ID: MBLKW1-021918	Units: ug/Kg			Analysis Date: 20-Feb-2018 10:15					
Client ID:	Run ID: VOA8_311132	SeqNo: 4442596		PrepDate:		DF: 50				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	250								
Ethylbenzene	ND	250								
m,p-Xylene	ND	500								
o-Xylene	ND	250								
Toluene	ND	250								
Xylenes, Total	ND	250								
Surr: 1,2-Dichloroethane-d4	2253	0	2500	0	90.1	76 - 125				
Surr: 4-Bromofluorobenzene	2432	0	2500	0	97.3	83 - 120				
Surr: Dibromofluoromethane	2489	0	2500	0	99.6	80 - 119				
Surr: Toluene-d8	2430	0	2500	0	97.2	81 - 118				

LCS	Sample ID: VLCSW1-021918	Units: ug/Kg	Analysis Date: 20-Feb-2018 09:05							
Client ID:	Run ID: VOA8_311132	SeqNo: 4442595	PrepDate:		DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	45.91	5.0	50	0	91.8	75 - 124				
Ethylbenzene	47.73	5.0	50	0	95.5	70 - 123				
m,p-Xylene	93.92	10	100	0	93.9	77 - 125				
o-Xylene	48.31	5.0	50	0	96.6	78 - 122				
Toluene	44.67	5.0	50	0	89.3	76 - 122				
Xylenes, Total	142.2	5.0	150	0	94.8	77 - 128				
Surr: 1,2-Dichloroethane-d4	46	0	50	0	92.0	76 - 125				
Surr: 4-Bromofluorobenzene	50.74	0	50	0	101	83 - 120				
Surr: Dibromofluoromethane	50.85	0	50	0	102	80 - 119				
Surr: Toluene-d8	47.74	0	50	0	95.5	81 - 118				

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

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: R311132 Instrument: VOA8 Method: SW8260

MS	Sample ID: HS18020971-01MS	Units: ug/Kg	Analysis Date: 20-Feb-2018 12:22							
Client ID:	Run ID: VOA8_311132	SeqNo: 4442747	PrepDate:	DF: 50						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	5913	240	2425	3655	93.1	70 - 130				
Ethylbenzene	3002	240	2425	0	124	70 - 130				
m,p-Xylene	5041	480	4850	0	104	70 - 130				
o-Xylene	2579	240	2425	0	106	70 - 130				
Toluene	2447	240	2425	0	101	70 - 130				
Xylenes, Total	7620	240	7275	0	105	70 - 130				
Surr: 1,2-Dichloroethane-d4	2319	0	2425	0	95.6	70 - 126				
Surr: 4-Bromofluorobenzene	2616	0	2425	0	108	72 - 120				
Surr: Dibromofluoromethane	2535	0	2425	0	105	70 - 130				
Surr: Toluene-d8	2258	0	2425	0	93.1	82 - 121				

MSD	Sample ID: HS18020971-01MSD	Units: ug/Kg				Analysis Date: 20-Feb-2018 12:45			
Client ID:	Run ID: VOA8_311132	SeqNo: 4442748		PrepDate:		DF: 50			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	6093	240	2425	3655	101	70 - 130	5913	3	30
Ethylbenzene	3099	240	2425	0	128	70 - 130	3002	3.18	30
m,p-Xylene	5343	480	4850	0	110	70 - 130	5041	5.8	30
o-Xylene	2703	240	2425	0	111	70 - 130	2579	4.69	30
Toluene	2610	240	2425	0	108	70 - 130	2447	6.45	30
Xylenes, Total	8046	240	7275	0	111	70 - 130	7620	5.43	30
Surr: 1,2-Dichloroethane-d4	2164	0	2425	0	89.2	70 - 126	2319	6.94	30
Surr: 4-Bromofluorobenzene	2525	0	2425	0	104	72 - 120	2616	3.54	30
Surr: Dibromofluoromethane	2523	0	2425	0	104	70 - 130	2535	0.489	30
Surr: Toluene-d8	2281	0	2425	0	94.1	82 - 121	2258	1.01	30

The following samples were analyzed in this batch: HS18020883-01

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

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: R311250 Instrument: VOA1 Method: SW8260

MBLK	Sample ID: VBLKW-180220	Units: ug/L	Analysis Date: 21-Feb-2018 01:06							
Client ID:	Run ID: VOA1_311250	SeqNo: 4445463	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	5.0								
Ethylbenzene	ND	5.0								
m,p-Xylene	ND	10								
o-Xylene	ND	5.0								
Toluene	ND	5.0								
Xylenes, Total	ND	5.0								
Surr: 1,2-Dichloroethane-d4	45.42	0	50	0	90.8	70 - 123				
Surr: 4-Bromofluorobenzene	46.81	0	50	0	93.6	83 - 122				
Surr: Dibromofluoromethane	48.22	0	50	0	96.4	73 - 126				
Surr: Toluene-d8	49.61	0	50	0	99.2	81 - 119				

Surr: Toluene-d8

LCS	Sample ID: VLCSW-180220	Units: ug/L	Analysis Date: 21-Feb-2018 00:13							
Client ID:	Run ID: VOA1_311250	SeqNo: 4445462	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	44.99	5.0	50	0	90.0	74 - 120				
Ethylbenzene	49.59	5.0	50	0	99.2	77 - 117				
m,p-Xylene	100.1	10	100	0	100	77 - 122				
o-Xylene	48.22	5.0	50	0	96.4	75 - 119				
Toluene	45.69	5.0	50	0	91.4	77 - 118				
Xylenes, Total	148.4	5.0	150	0	98.9	75 - 122				
Surr: 1,2-Dichloroethane-d4	50.65	0	50	0	101	70 - 130				
Surr: 4-Bromofluorobenzene	51.55	0	50	0	103	83 - 122				
Surr: Dibromofluoromethane	49.62	0	50	0	99.2	73 - 126				
Surr: Toluene-d8	49.84	0	50	0	99.7	81 - 119				

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

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: R311250		Instrument: VOA1		Method: SW8260						
MS	Sample ID: HS18020496-01MS	Units: ug/L			Analysis Date: 21-Feb-2018 03:20					
Client ID:	Run ID: VOA1_311250	SeqNo: 4445465		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Benzene	42.3	5.0	50	0	84.6	70 - 127				
Ethylbenzene	48.68	5.0	50	0	97.4	70 - 124				
m,p-Xylene	93.16	10	100	0	93.2	70 - 130				
o-Xylene	48.91	5.0	50	0	97.8	70 - 124				
Toluene	46.94	5.0	50	0	93.9	70 - 123				
Xylenes, Total	142.1	5.0	150	0	94.7	70 - 130				
Surr: 1,2-Dichloroethane-d4	51.34	0	50	0	103	70 - 126				
Surr: 4-Bromofluorobenzene	52.59	0	50	0	105	82 - 124				
Surr: Dibromofluoromethane	51.36	0	50	0	103	77 - 123				
Surr: Toluene-d8	52.2	0	50	0	104	82 - 127				

MSD	Sample ID: HS18020496-01MSD	Units: ug/L			Analysis Date: 21-Feb-2018 03:46					
Client ID:	Run ID: VOA1_311250	SeqNo: 4445466		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Benzene	42.84	5.0	50	0	85.7	70 - 127	42.3	1.29	20	
Ethylbenzene	43.82	5.0	50	0	87.6	70 - 124	48.68	10.5	20	
m,p-Xylene	88.92	10	100	0	88.9	70 - 130	93.16	4.66	20	
o-Xylene	47	5.0	50	0	94.0	70 - 124	48.91	3.98	20	
Toluene	42.65	5.0	50	0	85.3	70 - 123	46.94	9.58	20	
Xylenes, Total	135.9	5.0	150	0	90.6	70 - 130	142.1	4.42	20	
Surr: 1,2-Dichloroethane-d4	56.72	0	50	0	113	70 - 126	51.34	9.96	20	
Surr: 4-Bromofluorobenzene	50.88	0	50	0	102	82 - 124	52.59	3.29	20	
Surr: Dibromofluoromethane	51.73	0	50	0	103	77 - 123	51.36	0.714	20	
Surr: Toluene-d8	50.69	0	50	0	101	82 - 127	52.2	2.94	20	

The following samples were analyzed in this batch: HS18020883-02

The following samples were analyzed in this batch: HS18020883-02

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

Client: ALX Industries
Project: Intertek AIM Morgan City Commingled
WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: R311105 Instrument: WetChem_HS Method: SW9040

DUP	Sample ID: HS18020888-01DUP	Units: pH units	Analysis Date: 19-Feb-2018 17:27							
Client ID:	Run ID: WetChem_HS_311105	SeqNo: 4441695	PrepDate: DF: 1							
Analyte *	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.8	0.100					6.86	0.878	10	
Temp Deg C @pH	21.3	0					21.2	0.471	10	

The following samples were analyzed in this batch: HS18020883-01 HS18020883-02

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

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: R311268 Instrument: WetChem_HS Method: SW7.3.4.2

MBLK Sample ID: MBLK-311268 Units: mg/Kg Analysis Date: 21-Feb-2018 15:50
 Client ID: Run ID: WetChem_HS_311268 SeqNo: 4445920 PrepDate: DF: 1
 Analyte Result PQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD Limit Qual

Reactive Sulfide ND 100

LCS Sample ID: LCS-311268 Units: mg/Kg Analysis Date: 21-Feb-2018 15:50
 Client ID: Run ID: WetChem_HS_311268 SeqNo: 4445921 PrepDate: DF: 1
 Analyte Result PQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD Limit Qual

Reactive Sulfide 60 10.0 100 0 60.0 20 - 120

MS Sample ID: HS18020866-01MS Units: mg/Kg Analysis Date: 21-Feb-2018 15:50
 Client ID: Run ID: WetChem_HS_311268 SeqNo: 4445919 PrepDate: DF: 1
 Analyte Result PQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD Limit Qual

Reactive Sulfide 68 10.0 100 0 68.0 20 - 120

The following samples were analyzed in this batch: HS18020883-01 HS18020883-02

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

Client: ALX Industries
 Project: Intertek AIM Morgan City Commingled
 WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: R311272 Instrument: UV-2450 Method: SW7.3.3.2

MBLK	Sample ID: MBLK-311272	Units: mg/Kg			Analysis Date: 21-Feb-2018 15:58				
Client ID:		Run ID: UV-2450_311272	SeqNo: 4445962		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Reactive Cyanide	ND	100							

LCS	Sample ID: LCS-311272	Units: mg/Kg			Analysis Date: 21-Feb-2018 15:58					
Client ID:		Run ID: UV-2450_311272	SeqNo: 4445963		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Cyanide	0.67	10.0	10	0	6.70	5 - 100				J

MS	Sample ID: HS18020866-01MS	Units: mg/Kg				Analysis Date: 21-Feb-2018 15:58				
Client ID:		Run ID: UV-2450_311272	SeqNo: 4445965		PrepDate:			DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Reactive Cyanide	0.64	10.0	10	-0.02	6.60	5 - 100			J	

The following samples were analyzed in this batch: HS18020883-01 HS18020883-02

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

Client: ALX Industries
Project: Intertek AIM Morgan City Commingled
WorkOrder: HS18020883

QC BATCH REPORT

Batch ID: R311279 Instrument: WetChem_HS Method: SW1010

LCS Sample ID: LCS-R311279 Units: °F Analysis Date: 21-Feb-2018 14:30
Client ID: Run ID: WetChem_HS_311279 SeqNo: 4446033 PrepDate: DF: 1
Analyte Result PQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD Limit Qual
Ignitability 82.6 70.0 81 0 102 95 - 105

DUP Sample ID: HS18021006-01DUP Units: °F Analysis Date: 21-Feb-2018 14:30
Client ID: Run ID: WetChem_HS_311279 SeqNo: 4446034 PrepDate: DF: 1
Analyte Result PQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD Limit Qual
Ignitability > 212 70.0 0 0 20

The following samples were analyzed in this batch: HS18020883-01 HS18020883-02

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

Client: ALX Industries
Project: Intertek AIM Morgan City Commingled
WorkOrder: HS18020883

**QUALIFIERS,
ACRONYMS, UNITS**

<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 detected below quantitation limit
M	Manually integrated, see raw data for justification
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/SDL

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Unit Reported</u>	<u>Description</u>
°F	Fahrenheit degrees
Date	
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
pH Units	

CERTIFICATIONS, ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	17-027-0	27-Mar-2018
California	2919 2016-2018	31-Jul-2018
Illinois	004112	09-May-2018
Kentucky	123043	30-Apr-2018
Louisiana	03087 2017-2017	30-Jun-2018
North Dakota	R193 2017-2017	30-Apr-2018
Oklahoma	2017-088	31-Aug-2018
Texas	T104704231-17-19	30-Apr-2018
North Carolina	624-2018	31-Dec-2018

Sample Receipt Checklist

Client Name: ALX-Pasadena

Date/Time Received: 16-Feb-2018 12:02

Work Order: HS18020883

Received by: PSChecklist completed by: Raegen Giga 16-Feb-2018
eSignature DateReviewed by: Bernadette A. Fini 19-Feb-2018
eSignature DateMatrices: Liquid - Bi-PhaseCarrier name: ALS.HS

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
TX1005 solids received in hermetically sealed vials?	Yes ☐	No ☐	N/A ☒
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	

Temperature(s)/Thermometer(s):	0.8c/0.3c UC/C	IR 11
Cooler(s)/Kit(s):	42557	
Date/Time sample(s) sent to storage:	02/16/2018 18:20	
Water - VOA vials have zero headspace?	Yes ☐ No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐ No ☐	N/A ☒
pH adjusted?	Yes ☐ No ☐	N/A ☒
pH adjusted by:		

Login Notes: Bi-Phase sample - test codes added to both Phases,

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

Corrective Action:



Cincinnati, OH
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Everett, WA
+1 425 356 2600

Chain of Custody Form

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Salt Lake City, UT
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South Charleston, WV
+1 304 356 3168
York, PA
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Page 1 of 1

COC ID: 167113

Customer Information				Project Information				ALS Work Order #:															
Purchase Order	Project Name	Project Number	Bill To Company	Invoice Attn	Address	City/State/Zip	Phone	Fax	e-Mail Address	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
Work Order	Intertek AIM		Morgan City Commingled										X	X	X								
Company Name	ALX Industries																						
Send Report To	Rhonda Storey																						
Address	2204 Catalina Drive																						
City/State/Zip	Pasadena, TX 77503																						
Phone	832-767-2467																						
Fax																							
e-Mail Address																							
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold						
1	Commingled SPC Tote	12/08/2018	8:20 AM	liquid		1	X	X	X														
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
Sampler(s) Please Print & Sign				Shipment Method				Required Turnaround Time: (Check Box) <u>3 Days</u>				Results Due Date: <u>2/15/19</u>											
Date: 12/10/2018				Time: 1:00:00				Received by: [Signature]				Notes: (ALX Base Pricing)											
Date: 12/16/2018				Time: 1:00:00				Received by: [Signature]				Cooler Temp. (Check One Box Below)											
Date: 12/16/2018				Time: 1:00:00				Received by: [Signature]				Cooler ID											
Date: 12/16/2018				Time: 1:00:00				Received by: [Signature]				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 9-5035																							

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.