

## **Phase II Environmental Site Assessment**

**Sterling – Commerce Street  
1432 – 1434 E. Commerce Street  
&  
323 Idaho Street  
San Antonio, Texas 78205**

**Prepared for:**

Jasmine Engineering, Inc.  
115 East Travis, Suite 1020  
San Antonio, Texas 78205

**Prepared by:**

TTL/Drash Consultants  
San Antonio, Texas  
February 9, 2017  
Project No. 116E1164.02



February 9, 2017

Ms. Jasmine Azima  
Jasmine Engineering, Inc.  
115 East Travis, Suite 1020  
San Antonio, Texas 78205

T: 210.227.3000

**SUBJECT:**

Phase II Environmental Site Assessment  
Sterling – Commerce Street  
1432 – 1434 East Commerce Street  
& 323 Idaho Street  
San Antonio, Texas 78205

**Project No.:** 116E1164.02

Dear Ms. Azima:

TTL/Drash Consultants (TTL/Drash) is presenting the results from the Phase II Environmental Site Assessment (Phase II) performed for the above referenced project. This report is intended for the sole use and benefit of Jasmine Engineering, Inc. and may not be relied upon by any other party without express permission of TTL/Drash or Jasmine Engineering, Inc.

## **BACKGROUND**

### **Introduction**

TTL/Drash conducted an investigation to assess potential impacts to subsurface media at the Sterling – Commerce Street property located at 1432 – 1434 East Commerce Street and 323 Idaho Street in San Antonio, Bexar County, Texas (Site). A Site Vicinity Map is provided in Appendix A. This report documents the results of the investigation conducted on December 16, 2016. Conditions may exist which could not be identified as a result of this Phase II.

### **Purpose**

This Phase II was intended to evaluate soil and perched groundwater (if present) conditions for possible impacts from chemicals of concern (COCs). TTL/Drash evaluated the Site in order to determine the related likelihood of a significant release of COCs due to current and/or historic activities at the Site and/or the Site vicinity as identified in a prior Phase I Environmental Site Assessment (ESA) dated February 7, 2013 issued by Pape-Dawson Engineers, Inc. (Pape-Dawson) as well as observations documented during a Forensic Building Study (FBS) dated March 10, 2014 issued by Raba Kistner Consultants, Inc. (Raba Kistner).

The following is a synopsis of the findings and observations indicated in the documents reviewed:

- The prior Phase I ESA identified the Midway Cleaners and Model Dyers and Cleaners facilities as Recognized Environmental Conditions (RECs) and possible sources of Stoddard and chlorinated solvents which, due to the facilities location and

distance relative to the Site, may have adversely impacted the soils and/or groundwater within the Site boundary. Additionally, the Phase I ESA identified the San Antonio Fire Station #3, Imperial Loan and Jewelry Company, Commerce Quick Stop, Manuel Paint & Body Shop, and West's Auto Repair Shop/HW Kreger Repair as RECs and possible petroleum hydrocarbon sources of potential impact to Site soils and groundwater (Pape-Dawson, 2013).

- During performance of the FBS four soil borings were installed in and adjacent to the 1432 E. Commerce Street structure to assess the soil properties. Two of the soil boring logs (B-2 and B-3) indicate possible hydrocarbon odors from approximately 5 ½ feet to 7 feet below the floor slab (Raba Kistner, 2014).

The Phase II is not intended to identify additional areas of concern, evaluate the potential for release of other COCs, to identify the full lateral and vertical extent of release, determine appropriate cleanup actions, or develop a detailed estimate of costs to correct concerns identified.

### **Health and Safety Plan**

TTL/Drash developed a Health and Safety Plan that was specific to the property. The development of this plan is required by the Occupational Safety and Health Administration (OSHA) under Hazardous Waste Operations & Emergency Response 29 CFR 1910.120. The site Health and Safety Plan was designed to reduce the risk of physical or chemical exposures that may affect on-site workers in the proposed work area. The site Health and Safety Plan includes information about chemicals expected on the property, health and safety procedures for working on-site, and emergency response procedures. The Health and Safety Plan is on file at TTL/Drash's office.

### **Utility Locating**

A utility inspection was performed at the Site at least 48 hours prior to the initiation of the subsurface investigation at the request of the subcontract driller, as required by Texas State law. This inspection consisted of the marking the underground utility locations by authorized utility locating personnel.

### **Permits**

The City of San Antonio and Bexar County did not require drilling permits for borings or temporary monitoring wells.

## **SUBSURFACE INVESTIGATION**

### **Soil Sampling**

Soil samples from six on-site soil borings were collected continuously utilizing two-foot split barrel samplers or two to five-foot stainless steel macro core samplers equipped with dedicated disposable acetate sampling sleeves. A Site Boring Location Plan is provided in Appendix A. All soil samples were field screened using a photo-ionization detector (PID) calibrated to 100

parts per million (ppm) isobutylene. The following table summarizes the soil boring depths and locations.

Soil Boring	Total Depth (Feet)	Location
B-1	8.0	Interior soil boring located within the northwest central portion of the 1434 E. Commerce Street structure.
B-2	10.0	Interior soil boring located within the far north-eastern portion of the 1432 E. Commerce Street structure.
B-3	15.0	Exterior soil boring located east adjacent to the 1432 E. Commerce Street structure.
B-4	10.0	Exterior soil boring located north-northeast adjacent to the 323 Idaho Street former residential structure.
B-5	15.0	Exterior soil boring located south adjacent to the 1434 E. Commerce Street structure.
B-6	15.0	Exterior soil boring located on the southwest portion of the Site near Idaho Street.

Please note that soil borings B-1 and B-2 were terminated due to the limitations of the equipment utilized to obtain samples given the relatively confined operating spaces and the lithology encountered in the subsurface.

Soils encountered at the Site generally consisted of the following:

- Alternating silty clay and clay material with minor gravel and silt from the surface down approximately 5.5 feet to 8 feet.
- Mixed clast and chert gravelly clays and clayey gravels with some silt from approximately 5.5 to 8 feet below ground surface (bgs) to approximately 10 to 12.5 feet bgs.
- High plasticity (fat) and relatively firm clays below 10 to 12.5 feet bgs.

Soil samples were continuously collected from each boring. After collection, selected samples were placed in laboratory supplied containers appropriate for the media being sampled and the specified analyses based on field screening results, depth and lithology, and/or visual evidence of impact. Immediately after collection, the samples were labeled and stored on ice in a cooler. The samples were delivered to the analytical laboratory, Alamo Analytical Laboratories, Ltd. in San Antonio, Texas.

### **Groundwater Sampling**

Although the lithology encountered at the Site did not suggest the presence of perched groundwater, a one-inch temporary well was installed in boring B-3 and remained in place during the Phase II activities. No perched groundwater was detected in the temporary monitoring well or any of the soil borings installed at the Site. The temporary well was

constructed of one-inch diameter, schedule 40 poly-vinyl chloride (PVC) well screen and riser pipe, and was abandoned in accordance with Texas regulations (TAC, Title 16, Chapter 76.104) upon completion of field activities.

## LABORATORY ANALYTICAL RESULTS

### Laboratory Analytical Methods

The soil samples were transported under chain of custody to Alamo Analytical Laboratories, Ltd., a laboratory certified by the Texas Commission on Environmental Quality (TCEQ) and accredited by the National Environmental Laboratory Accreditation Conference (NELAC). Select soil samples were analyzed for total petroleum hydrocarbons (TPH) via TCEQ method TX 1005, Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Methyl tertiary-butyl ether (MTBE) and volatile organic compounds (VOCs) via EPA method 8260B (collected via EPA method 5035A), and Resource Conservation and Recovery Act (RCRA) 8 Metals via EPA methods 6010B and 7471A.

### Summary of Data

The TCEQ has developed the TRRP for regulating the cleanup and management of hazardous wastes and COCs which have been released into the environment at affected properties, from regulated facilities, as well as closures of certain waste management facility components (e.g., tanks, container storage areas, surface impoundments). TRRP establishes requirements to investigate releases and evaluate whether an affected property or facility closure poses an unacceptable risk to humans, air, groundwater, surface soils, subsurface soils and/or aquatic environments.

The TRRP rule establishes a tiered approach for the development of action levels referred to as Tier 1, 2, or 3 PCLs. The default values are the Tier 1 PCLs, which are normally the most stringent (lowest) action levels. TTL/Drash reviewed the soil data against the Tier 1 Residential Levels for <sup>GW</sup>Soil<sub>Ing</sub> and TotalSoil<sub>Comb</sub> PCLs. Regarding metals in soil, the PCL is the lower of the Tier 1 Residential Levels or the Texas-Specific Soil Background (TSB) concentrations, whichever is higher. In many cases, the PCL for metals in soil are some combination of the TRRP Tier 1 Residential Levels and the TSBs in the absence of site-specific background concentrations.

Based on TTL/Drash's review of the analytical results, only one specimen exceeded the TRRP Tier 1 Residential PCLs. Soil sample B-6 (12.5 – 15') returned a slightly elevated result for Lead of 15.8 milligrams per kilogram (mg/kg) which exceeds the Tier 1 Residential PCL (TSB) of 15.0 mg/kg. However, the TSBs represent median background concentrations for the entire state of Texas, and it is TTL/Drash's opinion that the presence of Lead is from naturally occurring sources.

However, the hydrocarbons evidenced at this Site are not from naturally occurring sources. Hydrocarbon impacts were observed in soil borings B-2 (5 - 7') and B-3 (7.5 – 8.5'). While it is

evident that the site has been impacted, the analytical results are below the TRRP Tier 1 Residential PCLs. This is most likely due to natural attenuation over time. It is more likely than not that the hydrocarbon impacts originated from off Site sources.

## CONCLUSIONS

TTL/Drash has performed a Phase II environmental site assessment at the property at 1432 – 1434 East Commerce Street and 323 Idaho Street in San Antonio, Bexar County, Texas in conformance with the scope and limitations of ASTM Practice E1903-11 and for the following objectives: to evaluate soil and perched groundwater (if present) conditions for possible impacts from chemicals of concern due to current and/or historic activities at the Site and/or the Site vicinity as identified in a prior Phase I Environmental Site Assessment (ESA) dated February 7, 2013 issued by Pape-Dawson Engineers, Inc. (Pape-Dawson) as well as observations documented during a Forensic Building Study (FBS) dated March 10, 2014 issued by Raba Kistner Consultants, Inc. (Raba Kistner).

The Phase II was not intended to satisfy the level of inquiry that may be necessary to support remedial solutions or migration pathways related to a release from the RECs. For this reason, additional sampling may be required to provide sufficient data to support remedial solutions and provide closure of environmental pathways, if requested.

- According to TTL/Drash's review of the laboratory analytical results, only one specimen exceeded the TRRP Tier 1 Residential PCLs; soil sample B-6 (12.5 – 15'). This sample returned a slightly elevated result for Lead and **it is TTL/Drash's opinion that this result is naturally occurring.**
- The analytical results indicate that the constituents of concern are below the TRRP Tier 1 Residential PCLs, which preclude any regulatory considerations. However, it is apparent that the Site has been impacted by hydrocarbons based on visual and olfactory evidence. Even though the hydrocarbon levels are low, which is most likely the result of attenuation over time, the hydrocarbon odors are significant.

It is more likely than not that these impacted soils will be encountered during earthwork construction at the Site for foundations and buried utilities. Normal disposition of these soils is not advised due to the hydrocarbon odors and the potential for encountering more impacted zones during construction. **It is TTL/Drash's opinion that the impacted soils be removed from the site.**

- These impacted soils can only be disposed at an approved landfill. This soil, before disposal, will have to be properly characterized (sampled). Based on characterization results various options may be available for disposal.

On the basis of TTL/Drash's review of the analytical data and the limitations governing this investigation, **TTL/Drash recommends no further environmental investigation or study is needed at this time.**

Please note that no environmental assessment can absolutely preclude the presence of hazardous materials on a Site. Future changes in environmental conditions and Site characteristics/usage may occur with the passage of time, in which case the conclusions in this report may require re-evaluation.

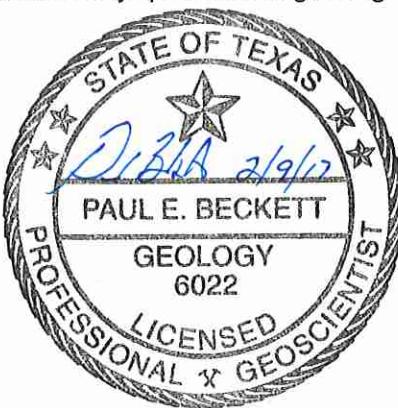
This report will assist the client and the client's legal counsel in evaluating and allocating the environmental risks that are always present with any real estate transaction or development. However, it is the responsibility of the client and the client's legal counsel to determine, based on the client's experience, whether additional information is required in order to meet the investigative burdens placed on real estate owners by state and federal agencies.

Thank you for selecting TTL/Drash to provide the environmental services for this phase of the project. We appreciate the opportunity to work with you, and we look forward to working with you on future projects. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Respectfully Submitted,  
**TTL/Drash Consultants**



Paul E. Beckett, P.G.  
Senior Project Geologist



Tomas Hernandez, Jr., P.G.  
Environmental Services Group  
Department Manager



Chester J. Drash, P.E.  
Executive Vice President & COO



The digital seal appearing on this report was authorized by  
Chester J. Drash, P.E. on February 9, 2017.

PEB/TH/set – 116E1164.02

cc: Addressee: (1) Electronic File

Appendix A – General Site Information

Appendix B – Boring Logs

Appendix C – Laboratory Analytical Report

**APPENDIX A**  
**GENERAL SITE INFORMATION**  
Site Vicinity Map  
Site Boring Location Plan

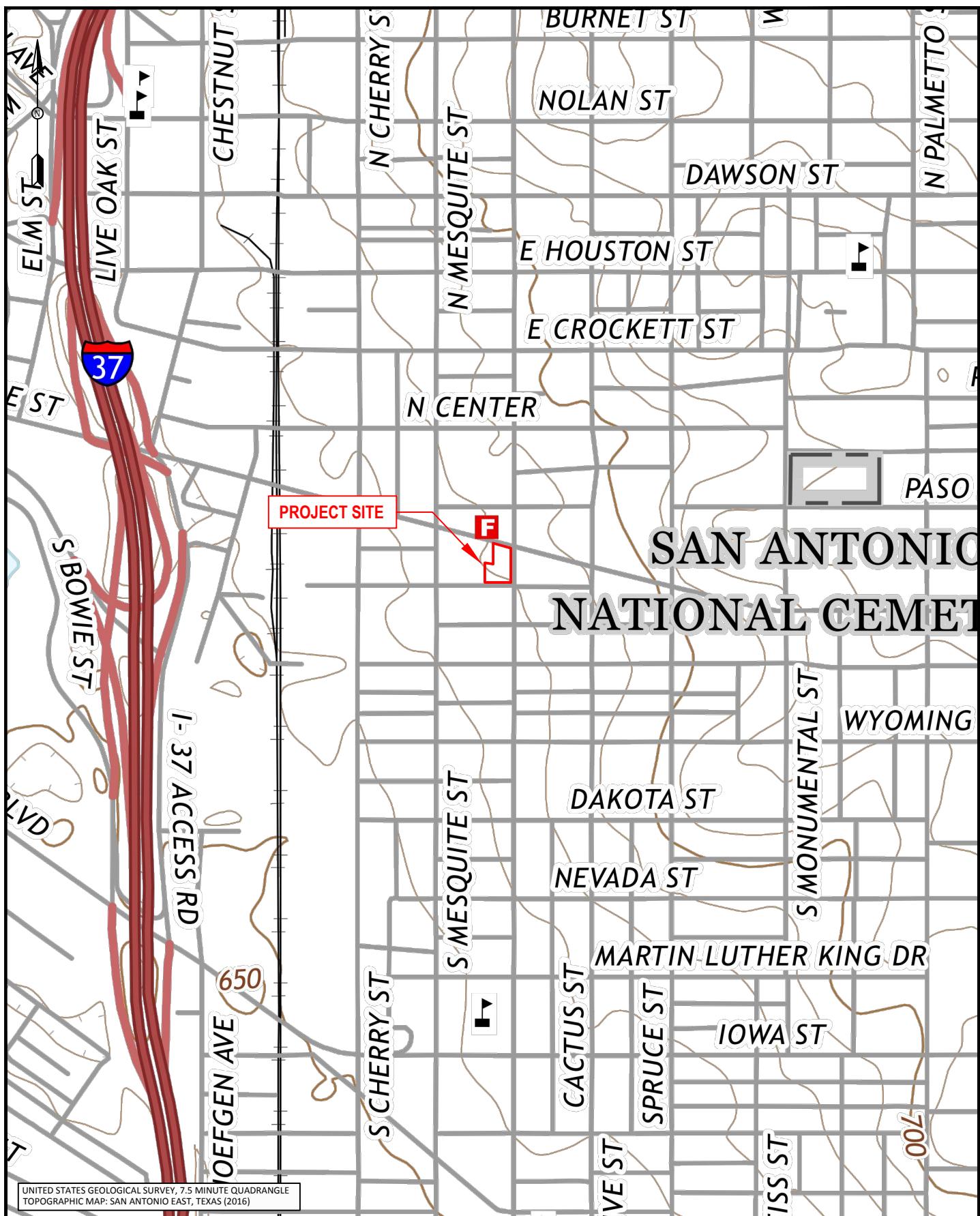


EXHIBIT  
A-1



  
Drash  
CONSULTANTS

1045 Central Parkway North, Suite 103 • San Antonio, Texas 78232  
Office: 210.340.5004 • Facsimile: 210.340.5009

Project Mgr:	PB	Project No.	
Drawn By:	JM	116E1164.00	
Checked By:	PB	Scale:	NOT TO SCALE
Reviewed By:	TH	Date:	01-04-2017

#### SITE BORING LOCATION PLAN

STERLING - COMMERCE STREET  
1432-1434 EAST COMMERCE STREET  
SAN ANTONIO, BEXAR COUNTY, TEXAS 78205

**EXHIBIT**  
**A-2**

**APPENDIX B**  
**BORING LOGS**



Drash Consultants, LLC  
1045 Central Parkway North, Suite 103  
San Antonio, Texas  
T: (210) 340-5004 F: (210) 340-5009

## BORING NUMBER B-1

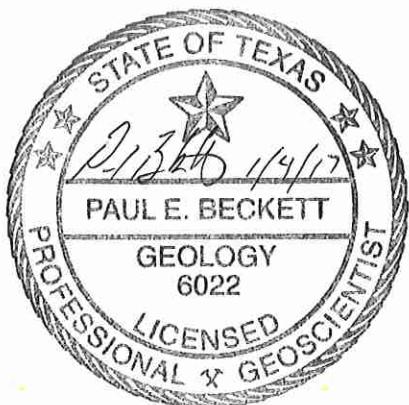
PAGE 1 OF 1

CLIENT Jasmine Engineering  
PROJECT NUMBER 116E1164  
DATE STARTED 12/16/17 COMPLETED 12/16/17  
DRILLING CONTRACTOR Vortex  
DRILLING METHOD Geoprobe  
LOGGED BY JM CHECKED BY PEB  
NOTES \_\_\_\_\_

PROJECT NAME Sterling - Commerce LSI  
PROJECT LOCATION 1432-1434 E. Commerce Street, San Antonio, TX  
GROUND ELEVATION \_\_\_\_\_ HOLE SIZE 3 inches  
GROUND WATER LEVELS:  
AT TIME OF DRILLING ---  
AT END OF DRILLING ---  
AFTER DRILLING ---

DEPTH (ft)	DRILLING METHOD	RECOVERY (%)	SAMPLE ID	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0							
	P	PROBE	83			(CL-ML) 10YR 3/1 very dark gray silty clay; soft, dry. 0.5	
2.5	P	PROBE	75			(CH) 10YR 3/1 very dark gray high plasticity clay; medium stiff and dry grading to soft and moist with trace silt.	
5.0	P	PROBE	100			- Transitions to 10YR 5/2 grayish-brown; soft and moist.	
7.5	P	PROBE	100	B-1 (6-8')		(GC) 10YR 5/2 grayish-brown clayey gravel with abundant chert; moist, increasing clay with depth. Larger gravels, less clay and very moist at 8 feet.	
						8.0	

Bottom of borehole at 8.0 feet.





Drash Consultants, LLC  
1045 Central Parkway North, Suite 103  
San Antonio, Texas  
T: (210) 340-5004 F: (210) 340-5009

## **BORING NUMBER B-2**

PAGE 1 OF 1

CLIENT Jasmine Engineering

PROJECT NUMBER 116E1164

DATE STARTED 12/16/17 COMPLETED 12/16/17

**DRILLING CONTRACTOR** Vortex

## DRILLING METHOD Geoprobe

LOGGED BY JM CHECKED BY PEB

## NOTES

PROJECT NAME Sterling - Commerce LSI

**PROJECT LOCATION** 1432-1434 E. Commerce Street, San Antonio, TX

GROUND ELEVATION \_\_\_\_\_ HOLE SIZE 3 inches

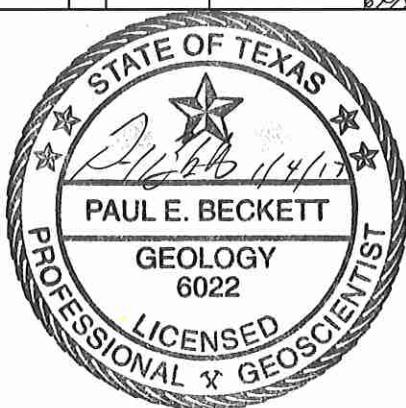
## GROUND WATER LEVELS:

**AT TIME OF DRILLING**

**AT END OF DRILLING**

## AFTER DRILLING

DEPTH (ft)	DRILLING METHOD	RECOVERY (%)	SAMPLE ID	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION		WELL DIAGRAM
0.0								
2.5	P	PROBE	17					
5.0	P	PROBE	100	B-2 (4-6')	PID = 11.5	0.3	Concrete slab (CH) 10YR 3/1 very dark gray high plasticity clay; soft and slightly moist with trace gravel	
7.5	P	PROBE	300		PID = 45			
10.0	P	PROBE	100	B-2 (8-10')	PID = 287.9		- Transitions to 10YR 5/1 gray; soft and slightly moist, slight hydrocarbon odor, trace calcareous nodules.	
					PID = 163.6		- Transitions to 2.5Y 5/3 light olive brown; trace calcareous deposits and small gravels, stronger hydrocarbon odor from 7 to 8'.	
					PID = 451.7	9.8	(GC) 2.5Y 5/3 light olive brown cherty gravel and	



These logs should not be used separately from the original report



Drash Consultants, LLC  
1045 Central Parkway North, Suite 103  
San Antonio, Texas  
T: (210) 340-5004 F: (210) 340-5009

## BORING NUMBER B-3

PAGE 1 OF 1

CLIENT Jasmine Engineering

PROJECT NUMBER 116E1164

DATE STARTED 12/16/17 COMPLETED 12/16/17

DRILLING CONTRACTOR Vortex

DRILLING METHOD Geoprobe

LOGGED BY JM CHECKED BY PEB

NOTES \_\_\_\_\_

PROJECT NAME Sterling - Commerce LSI

PROJECT LOCATION 1432-1434 E. Commerce Street, San Antonio, TX

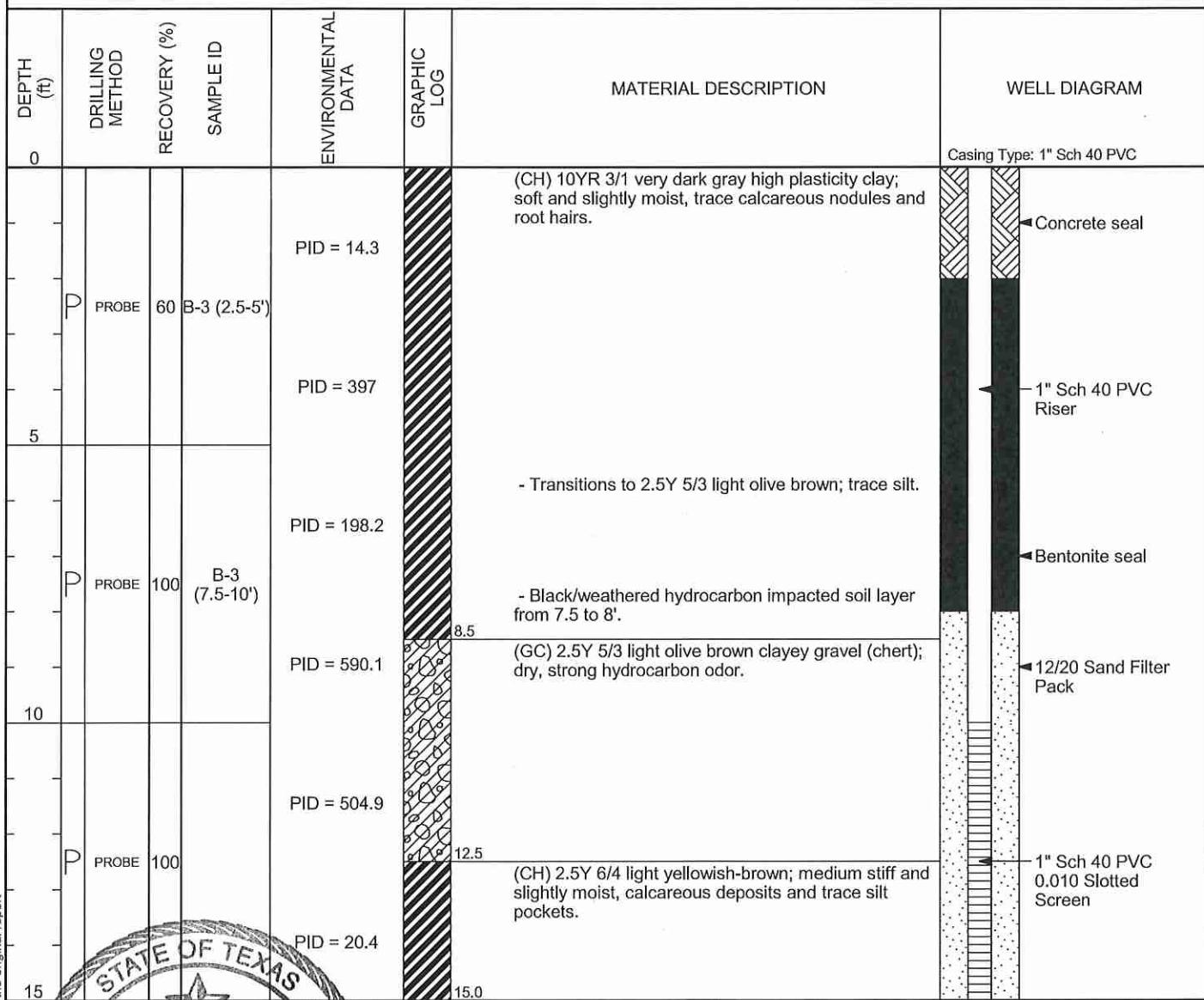
GROUND ELEVATION \_\_\_\_\_ HOLE SIZE 3 inches

GROUND WATER LEVELS:

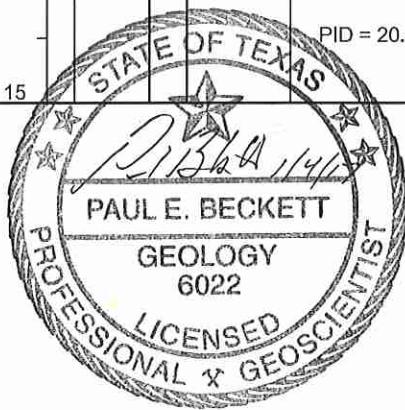
AT TIME OF DRILLING ---

AT END OF DRILLING ---

AFTER DRILLING ---



These logos should not be used separately from the original report





Drash Consultants, LLC  
1045 Central Parkway North, Suite 103  
San Antonio, Texas  
T: (210) 340-5004 F: (210) 340-5009

## BORING NUMBER B-4

PAGE 1 OF 1

CLIENT Jasmine Engineering

PROJECT NUMBER 116E1164

DATE STARTED 12/16/17 COMPLETED 12/16/17

DRILLING CONTRACTOR Vortex

DRILLING METHOD Geoprobe

LOGGED BY JM CHECKED BY PEB

NOTES \_\_\_\_\_

PROJECT NAME Sterling - Commerce LSI

PROJECT LOCATION 1432-1434 E. Commerce Street, San Antonio, TX

GROUND ELEVATION \_\_\_\_\_ HOLE SIZE 3 inches

GROUND WATER LEVELS:

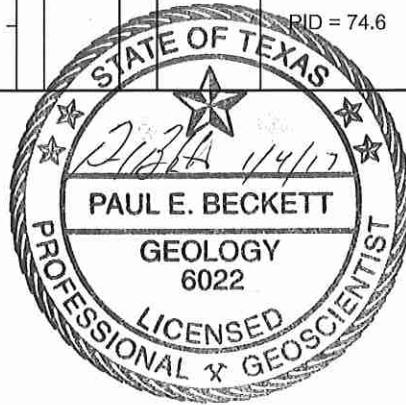
AT TIME OF DRILLING ---

AT END OF DRILLING ---

AFTER DRILLING ---

DEPTH (ft)	DRILLING METHOD	RECOVERY (%)	SAMPLE ID	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0							
5	P PROBE	40		PID = 55.6		(CH) 10YR 3/1 very dark gray high plasticity clay; soft and slightly moist.	
10	P PROBE	100B-4 (5-7.5')		PID = 31.3		- Transitions to 10YR 6/4 light yellowish-brown; soft and slightly moist	
15	P PROBE	100 (12.5-15')	B-4	PID = 58.6		(GC) 2.5Y 5/3 light olive brown clayey gravel (chert); moist with some ferrous staining.	
				PID = 38.7		(CH) 5Y 6/2 light olive gray and 2.5Y 6/4 light yellowish-brown high plasticity clay; trace silt, medium stiff and slightly moist.	
				PID = 18.1		(CH) 5Y 6/2 light olive gray and 2.5Y 6/4 light yellowish-brown high plasticity clay; trace silt, medium stiff and slightly moist.	
				PID = 74.6		Bottom of borehole at 15.0 feet.	

These logos should not be used separately from the original report





Drash Consultants, LLC  
1045 Central Parkway North, Suite 103  
San Antonio, Texas  
T: (210) 340-5004 F: (210) 340-5009

## BORING NUMBER B-5

PAGE 1 OF 1

CLIENT Jasmine Engineering

PROJECT NUMBER 116E1164

DATE STARTED 12/16/17 COMPLETED 12/16/17

DRILLING CONTRACTOR Vortex

DRILLING METHOD Geoprobe

LOGGED BY JM CHECKED BY PEB

NOTES \_\_\_\_\_

PROJECT NAME Sterling - Commerce LSI

PROJECT LOCATION 1432-1434 E. Commerce Street, San Antonio, TX

GROUND ELEVATION \_\_\_\_\_ HOLE SIZE 3 inches

GROUND WATER LEVELS:

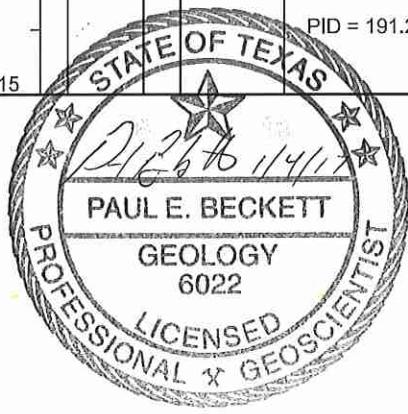
AT TIME OF DRILLING ---

AT END OF DRILLING ---

AFTER DRILLING ---

DEPTH (ft)	DRILLING METHOD	RECOVERY (%)	SAMPLE ID	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0							
5	P PROBE	5				Light tan and brown limestone gravel, clay and sand fill material	
10	P PROBE	100	B-5 (7.5-10')	PID = 15		(CH) 10YR 4/1 dark gray high plasticity clay; soft and slightly moist.	
15	P PROBE	100	B-5 (12.5-15')	PID = 24.5 PID = 24.9 PID = 191.2	5.0 14.0 15.0	- Transitions to 2.5Y 6/4 light yellowish-brown; trace calcite deposits, grading soft to medium stiff, slightly moist. - increasing calcite deposits with depth. (CH) 5Y 6/2 light olive gray and 2.5Y 6/4 light yellowish-brown high plasticity clay; medium stiff, slightly moist.	

These logs should not be used separately from the original report



Bottom of borehole at 15.0 feet.



Drash Consultants, LLC  
1045 Central Parkway North, Suite 103  
San Antonio, Texas  
T: (210) 340-5004 F: (210) 340-5009

## BORING NUMBER B-6

PAGE 1 OF 1

CLIENT Jasmine Engineering

PROJECT NUMBER 116E1164

DATE STARTED 12/16/17 COMPLETED 12/16/17

DRILLING CONTRACTOR Vortex

DRILLING METHOD Geoprobe

LOGGED BY JM CHECKED BY PEB

NOTES \_\_\_\_\_

PROJECT NAME Sterling - Commerce LSI

PROJECT LOCATION 1432-1434 E. Commerce Street, San Antonio, TX

GROUND ELEVATION \_\_\_\_\_ HOLE SIZE 3 inches

GROUND WATER LEVELS:

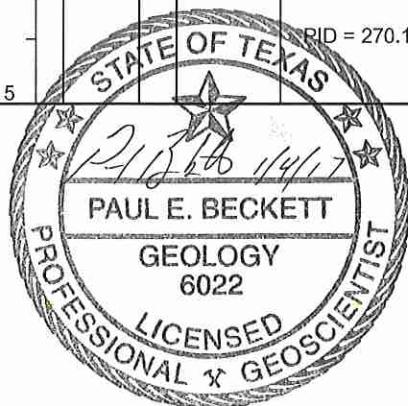
AT TIME OF DRILLING ---

AT END OF DRILLING ---

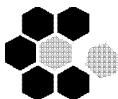
AFTER DRILLING ---

DEPTH (ft)	DRILLING METHOD	RECOVERY (%)	SAMPLE ID	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0							
5	P PROBE	53		PID = 34.8		(CH) 10YR 3/1 very dark gray high plasticity clay; soft and slightly moist; root hairs throughout, trace gravels.	
10	P PROBE	100		PID = 36.3		- Transitions to 2.5Y 6/4 light yellowish-brown; grades soft to medium stiff, slightly moist, calcite deposits throughout and trace cherty gravels from 9 to 10'.	
15	P PROBE	100	B-6 (12.5-15')	PID = 116			
				PID = 136.8			
				PID = 185.2		- Transitions to 5Y 6/2 light olive gray and 2.5Y 6/4 light yellowish-brown; medium stiff and slightly moist, trace calcite.	
				PID = 270.1			
				15.0		Bottom of borehole at 15.0 feet.	

These logos should not be used separately from the original report



**APPENDIX C**  
**LABORATORY ANALYTICAL REPORT**



## ALAMO ANALYTICAL LABORATORIES, LTD.

Main: 10526 Gulfdale • San Antonio, Texas 78216-3601 • (210) 340-8121 . Fax. (210) 340-8123

---

### REPORT NARRATIVE

12/22/2016

Paul Beckett

Drash Consultants, LLC

1045 Central Parkway North, Suite 103

San Antonio , Texas - 78232

TEL: (210) 340-5004

Email: [pbeckett@drashconsultants.com](mailto:pbeckett@drashconsultants.com)

FAX:

RE: 116G1164 Sterling - Commerce LSI

Dear Paul Beckett:

Order No.: 1612077

Enclosed please find the analytical report for the sample/s received on 12/17/2016.

**HOLDING TIMES:** All samples were analyzed within prescribed holding times and/or in accordance with the Sample Acceptance Policy unless otherwise noted in the report.

**DATA:** Sample were prepared, analyzed and reported using the methods outlined in the following references: Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

**QA/QC:** All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives, except as noted in the report with data qualifiers.

**SUBCONTRACTED:** No analyses were subcontracted.

**COMMENTS:** No significant observations were made.

If you have any questions regarding these test results call (210) 340-8121.

Thank you,

Reddy Gosala, Ph.D

Laboratory Director

#### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client.  
Reproduction of this report wholly or in part requires written permission of the client.



## Analytical Results Report

**CLIENT:** Drash Consultants, LLC  
**Lab Order:** 1612077  
**Project:** 116G1164 Sterling - Commerce LSI

**Collection Date:** 12/16/2016 10:36:00 AM  
**Matrix:** SOIL  
**Lab ID:** 1612077-01

**Client Sample ID:** B - 1 (6 - 8')

Analyses	Test Code	Result	Limit	Units	DF	Date Analyzed
<b>TestName: MERCURY, TOTAL</b>						
Mercury	HG_R_S	< 0.04	0.04	mg/Kg-dry	1	12/21/2016
<b>TestName: PERCENT MOISTURE</b>						
Percent Moisture	PMOIST	11.2	0.1	wt%	1	12/20/2016
<b>TestName: METALS-RCRA, Total</b>						
Arsenic	RCRA7_S	< 2.5	2.5	mg/Kg-dry	1	12/22/2016
Barium	RCRA7_S	162	1	mg/Kg-dry	1	12/22/2016
Cadmium	RCRA7_S	< 0.5	0.5	mg/Kg-dry	1	12/22/2016
Chromium	RCRA7_S	16.6	0.5	mg/Kg-dry	1	12/22/2016
Lead	RCRA7_S	13.7	1.5	mg/Kg-dry	1	12/22/2016
Selenium	RCRA7_S	< 2	2	mg/Kg-dry	1	12/22/2016
Silver	RCRA7_S	< 0.78	0.78	mg/Kg-dry	1	12/22/2016
<b>TestName: TOTAL PETROLEUM HYDROCAR</b>						
Hydrocarbons, C6-C12	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C12-C28	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C28-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, C6-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016

## Surrogate Recoveries

Test Code	Analyte	Recovery	Control Limits
TPH1005_S	1-Chlorooctadecane	79%	70—130
TPH1005_S	1-Chlorooctane	83%	70—130

For Surrogates: 0 = Dil. Out

Approved by:

## Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5

J - Analyte detected below quantitation limits



## Analytical Results Report

**CLIENT:** Drash Consultants, LLC  
**Lab Order:** 1612077  
**Project:** 116G1164 Sterling - Commerce LSI

**Collection Date:** 12/16/2016 11:48:00 AM  
**Matrix:** SOIL  
**Lab ID:** 1612077-03

**Client Sample ID:** B - 2 (8 - 10')

Analyses	Test Code	Result	Limit	Units	DF	Date Analyzed
<b>TestName: MERCURY, TOTAL</b>						
Mercury	HG_R_S	< 0.04	0.04	mg/Kg-dry	1	12/21/2016
<b>TestName: PERCENT MOISTURE</b>						
Percent Moisture	PMOIST	19.4	0.1	wt%	1	12/20/2016
<b>TestName: METALS-RCRA, Total</b>						
Arsenic	RCRA7_S	< 2.5	2.5	mg/Kg-dry	1	12/22/2016
Barium	RCRA7_S	182	1	mg/Kg-dry	1	12/22/2016
Cadmium	RCRA7_S	< 0.5	0.5	mg/Kg-dry	1	12/22/2016
Chromium	RCRA7_S	10.9	0.5	mg/Kg-dry	1	12/22/2016
Lead	RCRA7_S	5.19	1.5	mg/Kg-dry	1	12/22/2016
Selenium	RCRA7_S	< 2	2	mg/Kg-dry	1	12/22/2016
Silver	RCRA7_S	< 0.78	0.78	mg/Kg-dry	1	12/22/2016
<b>TestName: TOTAL PETROLEUM HYDROCAR</b>						
Hydrocarbons, C6-C12	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C12-C28	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C28-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, C6-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016

## Surrogate Recoveries

Test Code	Analyte	Recovery	Control Limits
TPH1005_S	1-Chlorooctadecane	100%	70—130
TPH1005_S	1-Chlorooctane	90%	70—130

For Surrogates: 0 = Dil. Out

J - Analyte detected below quantitation limits

Approved by:

## Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



## Analytical Results Report

**CLIENT:** Drash Consultants, LLC  
**Lab Order:** 1612077  
**Project:** 116G1164 Sterling - Commerce LSI

**Collection Date:** 12/16/2016 2:36:00 PM  
**Matrix:** SOIL  
**Lab ID:** 1612077-05

**Client Sample ID:** B - 3 (7.5 - 10')

Analyses	Test Code	Result	Limit	Units	DF	Date Analyzed
<b>TestName: MERCURY, TOTAL</b>						
Mercury	HG_R_S	< 0.04	0.04	mg/Kg-dry	1	12/21/2016
<b>TestName: PERCENT MOISTURE</b>						
Percent Moisture	PMOIST	24.9	0.1	wt%	1	12/20/2016
<b>TestName: METALS-RCRA, Total</b>						
Arsenic	RCRA7_S	< 2.5	2.5	mg/Kg-dry	1	12/22/2016
Barium	RCRA7_S	252	1	mg/Kg-dry	1	12/22/2016
Cadmium	RCRA7_S	< 0.5	0.5	mg/Kg-dry	1	12/22/2016
Chromium	RCRA7_S	19.3	0.5	mg/Kg-dry	1	12/22/2016
Lead	RCRA7_S	14.9	1.5	mg/Kg-dry	1	12/22/2016
Selenium	RCRA7_S	< 2	2	mg/Kg-dry	1	12/22/2016
Silver	RCRA7_S	< 0.78	0.78	mg/Kg-dry	1	12/22/2016
<b>TestName: TOTAL PETROLEUM HYDROCAR</b>						
Hydrocarbons, C6-C12	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C12-C28	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C28-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, C6-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016

## Surrogate Recoveries

Test Code	Analyte	Recovery	Control Limits
TPH1005_S	1-Chlorooctadecane	77%	70—130
TPH1005_S	1-Chlorooctane	76%	70—130

For Surrogates: 0 = Dil. Out

J - Analyte detected below quantitation limits

Approved by:

## Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



## Analytical Results Report

**CLIENT:** Drash Consultants, LLC  
**Lab Order:** 1612077  
**Project:** 116G1164 Sterling - Commerce LSI

**Collection Date:** 12/16/2016 3:06:00 PM  
**Matrix:** SOIL  
**Lab ID:** 1612077-07

**Client Sample ID:** B - 4 (12.5 - 15')

Analyses	Test Code	Result	Limit	Units	DF	Date Analyzed
<b>TestName: MERCURY, TOTAL</b>						
Mercury	HG_R_S	< 0.04	0.04	mg/Kg-dry	1	12/21/2016
<b>TestName: PERCENT MOISTURE</b>						
Percent Moisture	PMOIST	18.9	0.1	wt%	1	12/20/2016
<b>TestName: METALS-RCRA, Total</b>						
Arsenic	RCRA7_S	< 2.5	2.5	mg/Kg-dry	1	12/22/2016
Barium	RCRA7_S	40.5	1	mg/Kg-dry	1	12/22/2016
Cadmium	RCRA7_S	< 0.5	0.5	mg/Kg-dry	1	12/22/2016
Chromium	RCRA7_S	29.6	0.5	mg/Kg-dry	1	12/22/2016
Lead	RCRA7_S	8.26	1.5	mg/Kg-dry	1	12/22/2016
Selenium	RCRA7_S	< 2	2	mg/Kg-dry	1	12/22/2016
Silver	RCRA7_S	< 0.78	0.78	mg/Kg-dry	1	12/22/2016
<b>TestName: TOTAL PETROLEUM HYDROCAR</b>						
Hydrocarbons, C6-C12	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C12-C28	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C28-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, C6-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016

## Surrogate Recoveries

Test Code	Analyte	Recovery	Control Limits
TPH1005_S	1-Chlorooctadecane	75%	70—130
TPH1005_S	1-Chlorooctane	78%	70—130

For Surrogates: 0 = Dil. Out

J - Analyte detected below quantitation limits

Approved by:

## Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



## Analytical Results Report

**CLIENT:** Drash Consultants, LLC  
**Lab Order:** 1612077  
**Project:** 116G1164 Sterling - Commerce LSI

**Collection Date:** 12/16/2016 3:23:00 PM  
**Matrix:** SOIL  
**Lab ID:** 1612077-08

**Client Sample ID:** B - 5 (5 - 7.5')

Analyses	Test Code	Result	Limit	Units	DF	Date Analyzed
<b>TestName: MERCURY, TOTAL</b>						
Mercury	HG_R_S	< 0.04	0.04	mg/Kg-dry	1	12/21/2016
<b>TestName: PERCENT MOISTURE</b>						
Percent Moisture	PMOIST	24.5	0.1	wt%	1	12/20/2016
<b>TestName: METALS-RCRA, Total</b>						
Arsenic	RCRA7_S	< 2.5	2.5	mg/Kg-dry	1	12/22/2016
Barium	RCRA7_S	355	1	mg/Kg-dry	1	12/22/2016
Cadmium	RCRA7_S	< 0.5	0.5	mg/Kg-dry	1	12/22/2016
Chromium	RCRA7_S	23.7	0.5	mg/Kg-dry	1	12/22/2016
Lead	RCRA7_S	13.3	1.5	mg/Kg-dry	1	12/22/2016
Selenium	RCRA7_S	< 2	2	mg/Kg-dry	1	12/22/2016
Silver	RCRA7_S	< 0.78	0.78	mg/Kg-dry	1	12/22/2016
<b>TestName: TOTAL PETROLEUM HYDROCAR</b>						
Hydrocarbons, C6-C12	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C12-C28	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C28-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, C6-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016

## Surrogate Recoveries

Test Code	Analyte	Recovery	Control Limits
TPH1005_S	1-Chlorooctadecane	74%	70—130
TPH1005_S	1-Chlorooctane	72%	70—130

For Surrogates: 0 = Dil. Out

J - Analyte detected below quantitation limits

Approved by:

## Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



## Analytical Results Report

**CLIENT:** Drash Consultants, LLC  
**Lab Order:** 1612077  
**Project:** 116G1164 Sterling - Commerce LSI

**Collection Date:** 12/16/2016 4:03:00 PM  
**Matrix:** SOIL  
**Lab ID:** 1612077-10

**Client Sample ID:** B - 6 (12.5 - 15')

Analyses	Test Code	Result	Limit	Units	DF	Date Analyzed
<b>TestName: MERCURY, TOTAL</b>						
Mercury	HG_R_S	< 0.04	0.04	mg/Kg-dry	1	12/21/2016
<b>TestName: PERCENT MOISTURE</b>						
Percent Moisture	PMOIST	25.7	0.1	wt%	1	12/20/2016
<b>TestName: METALS-RCRA, Total</b>						
Arsenic	RCRA7_S	< 2.5	2.5	mg/Kg-dry	1	12/22/2016
Barium	RCRA7_S	66.8	1	mg/Kg-dry	1	12/22/2016
Cadmium	RCRA7_S	< 0.5	0.5	mg/Kg-dry	1	12/22/2016
Chromium	RCRA7_S	17.9	0.5	mg/Kg-dry	1	12/22/2016
Lead	RCRA7_S	15.8	1.5	mg/Kg-dry	1	12/22/2016
Selenium	RCRA7_S	< 2	2	mg/Kg-dry	1	12/22/2016
Silver	RCRA7_S	< 0.78	0.78	mg/Kg-dry	1	12/22/2016
<b>TestName: TOTAL PETROLEUM HYDROCAR</b>						
Hydrocarbons, C6-C12	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C12-C28	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, >C28-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016
Hydrocarbons, C6-C35	TPH1005_S	< 50	50	mg/Kg	1	12/19/2016

## Surrogate Recoveries

Test Code	Analyte	Recovery	Control Limits
TPH1005_S	1-Chlorooctadecane	81%	70—130
TPH1005_S	1-Chlorooctane	79%	70—130

For Surrogates: 0 = Dil. Out

J - Analyte detected below quantitation limits

Approved by:

## Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 2 (4 - 6')

**Date:** 22-Dec-16

**Date Received:** 17-Dec-16

**Collection Date:** 16-Dec-16

**Preparation Date:** 21-Dec-16

**Matrix:** SOIL

**Lab ID:** 1612077-02A

**BTEX**

**SW8260B**

**Analyst:** SS

<b>Analyst</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>DF</b>	<b>Units</b>	<b>Date Analyzed</b>
Benzene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Toluene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Ethylbenzene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Xylenes, Total	< 0.015	0.015	1	mg/Kg	21-Dec-16
Methyl tert-butyl ether	< 0.005	0.005	1	mg/Kg	21-Dec-16

#### Surrogate Recoveries

<b>Analyte</b>	<b>Recovery</b>	<b>Control Limits</b>
1,2-Dichloroethane-d4	89%	61—145
Toluene-d8	120%	54—163

For Surrogates: 0 = Dil. Out

Approved by:

#### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



Client: Drash Consultants, LLC

Date: 22-Dec-16

Work Order: 1612077

Date Received: 17-Dec-16

Project Name: 116G1164 Sterling - Commerce LSI

Collection Date: 16-Dec-16

Preparation Date: 21-Dec-16

Client Sample ID B - 3 (2.5 - 5')

Matrix: SOIL  
Lab ID: 1612077-04A**BTEX****SW8260B****Analyst: SS**

Analyte	Reporting			Date	
	Result	Limit	DF	Units	Analyzed
Benzene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Toluene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Ethylbenzene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Xylenes, Total	< 0.015	0.015	1	mg/Kg	21-Dec-16
Methyl tert-butyl ether	< 0.005	0.005	1	mg/Kg	21-Dec-16

**Surrogate Recoveries**

Analyte	Recovery	Control Limits
1,2-Dichloroethane-d4	87%	61—145
Toluene-d8	126%	54—163

For Surrogates: 0 = Dil. Out

Approved by:

**Report of Laboratory Analysis**

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



Client: Drash Consultants, LLC

Date: 22-Dec-16

Work Order: 1612077

Date Received: 17-Dec-16

Project Name: 116G1164 Sterling - Commerce LSI

Collection Date: 16-Dec-16

Client Sample ID B - 4 (5 - 7.5')

Preparation Date: 21-Dec-16

Matrix: SOIL

Lab ID: 1612077-06A

**BTEX****SW8260B****Analyst: SS**

Analyst	Result	Reporting Limit	DF	Units	Date Analyzed
Benzene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Toluene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Ethylbenzene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Xylenes, Total	< 0.015	0.015	1	mg/Kg	21-Dec-16
Methyl tert-butyl ether	< 0.005	0.005	1	mg/Kg	21-Dec-16

**Surrogate Recoveries**

Analyte	Recovery	Control Limits
1,2-Dichloroethane-d4	92%	61—145
Toluene-d8	117%	54—163

For Surrogates: 0 = Dil. Out

Approved by:

**Report of Laboratory Analysis**

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



Client: Drash Consultants, LLC

Date: 22-Dec-16

Work Order: 1612077

Date Received: 17-Dec-16

Project Name: 116G1164 Sterling - Commerce LSI

Collection Date: 16-Dec-16

Preparation Date: 21-Dec-16

Client Sample ID B - 5 (12.5 - 15')

Matrix: SOIL  
Lab ID: 1612077-09A**BTEX****SW8260B****Analyst: SS**

Analyst	Result	Reporting Limit	DF	Units	Date Analyzed
Benzene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Toluene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Ethylbenzene	< 0.005	0.005	1	mg/Kg	21-Dec-16
Xylenes, Total	< 0.015	0.015	1	mg/Kg	21-Dec-16
Methyl tert-butyl ether	< 0.005	0.005	1	mg/Kg	21-Dec-16

**Surrogate Recoveries**

Analyte	Recovery	Control Limits
1,2-Dichloroethane-d4	86%	61—145
Toluene-d8	121%	54—163

For Surrogates: 0 = Dil. Out

Approved by:

**Report of Laboratory Analysis**

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 1 (6 - 8')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-01A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyte	Result	Reporting Limit	DF	Units	Date Analyzed
1,1,1,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,1-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromo-3-chloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromoethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,3,5-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,4-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
2,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
2-Butanone	< 10	10	1	ug/Kg	21-Dec-16
2-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
2-Hexanone	< 10	10	1	ug/Kg	21-Dec-16
4-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Isopropyltoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Methyl-2-pentanone	< 10	10	1	ug/Kg	21-Dec-16
Acetone	< 10	10	1	ug/Kg	21-Dec-16
Benzene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 1 (6 - 8')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-01A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyst	Result	Reporting Limit	DF	Units	Date Analyzed
Bromobenzene	< 5	5	1	ug/Kg	21-Dec-16
Bromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromodichloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromoform	< 5	5	1	ug/Kg	21-Dec-16
Bromomethane	< 5	5	1	ug/Kg	21-Dec-16
Carbon disulfide	< 5	5	1	ug/Kg	21-Dec-16
Carbon tetrachloride	< 5	5	1	ug/Kg	21-Dec-16
Chlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
Chloroethane	< 5	5	1	ug/Kg	21-Dec-16
Chloroform	< 5	5	1	ug/Kg	21-Dec-16
Chloromethane	< 5	5	1	ug/Kg	21-Dec-16
cis-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
cis-1,3-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
Dibromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Dibromomethane	< 5	5	1	ug/Kg	21-Dec-16
Dichlorodifluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Ethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Hexachlorobutadiene	< 5	5	1	ug/Kg	21-Dec-16
Iodomethane	< 5	5	1	ug/Kg	21-Dec-16
Isopropylbenzene	< 5	5	1	ug/Kg	21-Dec-16
m,p-Xylenes	< 10	10	1	ug/Kg	21-Dec-16
Methyl tert-butyl ether	< 5	5	1	ug/Kg	21-Dec-16
Methylene chloride	< 5	5	1	ug/Kg	21-Dec-16
n-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
n-Propylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Naphthalene	< 15	15	1	ug/Kg	21-Dec-16
o-Xylene	< 5	5	1	ug/Kg	21-Dec-16
sec-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Styrene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 1 (6 - 8')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-01A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyte	Reporting				Date Analyzed
	Result	Limit	DF	Units	
				ug/Kg	
tert-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Tetrachloroethene	< 5	5	1	ug/Kg	21-Dec-16
Toluene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,3-Dichloropropene	< 10	10	1	ug/Kg	21-Dec-16
Trichloroethene	< 5	5	1	ug/Kg	21-Dec-16
Trichlorofluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Vinyl chloride	< 2	2	1	ug/Kg	21-Dec-16

### Surrogate Recoveries

Analyte	Recovery	Control Limits
1,2-Dichloroethane-d4	88%	61—145
4-Bromofluorobenzene	102%	46—164
Dibromofluoromethane	83%	48—160
Toluene-d8	124%	54—163

For Surrogates: 0 = Dil. Out

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 2 (8 - 10')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-03A

### Volatile Organics by GC/MS

### SW8260B

**Analyst:** SS

Analyte	Result	Reporting Limit	DF	Units	Date Analyzed
1,1,1,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,1-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromo-3-chloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromoethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,3,5-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,4-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
2,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
2-Butanone	< 10	10	1	ug/Kg	21-Dec-16
2-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
2-Hexanone	< 10	10	1	ug/Kg	21-Dec-16
4-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Isopropyltoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Methyl-2-pentanone	< 10	10	1	ug/Kg	21-Dec-16
Acetone	< 10	10	1	ug/Kg	21-Dec-16
Benzene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 2 (8 - 10')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-03A

### Volatile Organics by GC/MS

### SW8260B

**Analyst:** SS

<b>Analyst</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>DF</b>	<b>Units</b>	<b>Date Analyzed</b>
Bromobenzene	< 5	5	1	ug/Kg	21-Dec-16
Bromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromodichloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromoform	< 5	5	1	ug/Kg	21-Dec-16
Bromomethane	< 5	5	1	ug/Kg	21-Dec-16
Carbon disulfide	< 5	5	1	ug/Kg	21-Dec-16
Carbon tetrachloride	< 5	5	1	ug/Kg	21-Dec-16
Chlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
Chloroethane	< 5	5	1	ug/Kg	21-Dec-16
Chloroform	< 5	5	1	ug/Kg	21-Dec-16
Chloromethane	< 5	5	1	ug/Kg	21-Dec-16
cis-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
cis-1,3-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
Dibromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Dibromomethane	< 5	5	1	ug/Kg	21-Dec-16
Dichlorodifluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Ethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Hexachlorobutadiene	< 5	5	1	ug/Kg	21-Dec-16
Iodomethane	< 5	5	1	ug/Kg	21-Dec-16
Isopropylbenzene	5.4	5	1	ug/Kg	21-Dec-16
m,p-Xylenes	< 10	10	1	ug/Kg	21-Dec-16
Methyl tert-butyl ether	< 5	5	1	ug/Kg	21-Dec-16
Methylene chloride	< 5	5	1	ug/Kg	21-Dec-16
n-Butylbenzene	5.4	5	1	ug/Kg	21-Dec-16
n-Propylbenzene	11.6	5	1	ug/Kg	21-Dec-16
Naphthalene	< 15	15	1	ug/Kg	21-Dec-16
o-Xylene	< 5	5	1	ug/Kg	21-Dec-16
sec-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Styrene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 2 (8 - 10')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-03A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyte	Reporting				Date Analyzed
	Result	Limit	DF	Units	
				ug/Kg	
tert-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Tetrachloroethene	< 5	5	1	ug/Kg	21-Dec-16
Toluene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,3-Dichloropropene	< 10	10	1	ug/Kg	21-Dec-16
Trichloroethene	< 5	5	1	ug/Kg	21-Dec-16
Trichlorofluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Vinyl chloride	< 2	2	1	ug/Kg	21-Dec-16

### Surrogate Recoveries

Analyte	Recovery	Control Limits
1,2-Dichloroethane-d4	62%	61—145
4-Bromofluorobenzene	102%	46—164
Dibromofluoromethane	73%	48—160
Toluene-d8	143%	54—163

For Surrogates: 0 = Dil. Out

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 3 (7.5 - 10')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-05A

### Volatile Organics by GC/MS

### SW8260B

**Analyst:** SS

Analyte	Result	Reporting Limit	DF	Units	Date Analyzed
1,1,1,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,1-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromo-3-chloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromoethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,3,5-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,4-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
2,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
2-Butanone	< 10	10	1	ug/Kg	21-Dec-16
2-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
2-Hexanone	< 10	10	1	ug/Kg	21-Dec-16
4-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Isopropyltoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Methyl-2-pentanone	< 10	10	1	ug/Kg	21-Dec-16
Acetone	< 10	10	1	ug/Kg	21-Dec-16
Benzene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 3 (7.5 - 10')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-05A

### Volatile Organics by GC/MS

### SW8260B

**Analyst:** SS

Analyst	Result	Reporting Limit	DF	Units	Date Analyzed
Bromobenzene	< 5	5	1	ug/Kg	21-Dec-16
Bromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromodichloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromoform	< 5	5	1	ug/Kg	21-Dec-16
Bromomethane	< 5	5	1	ug/Kg	21-Dec-16
Carbon disulfide	< 5	5	1	ug/Kg	21-Dec-16
Carbon tetrachloride	< 5	5	1	ug/Kg	21-Dec-16
Chlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
Chloroethane	< 5	5	1	ug/Kg	21-Dec-16
Chloroform	< 5	5	1	ug/Kg	21-Dec-16
Chloromethane	< 5	5	1	ug/Kg	21-Dec-16
cis-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
cis-1,3-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
Dibromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Dibromomethane	< 5	5	1	ug/Kg	21-Dec-16
Dichlorodifluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Ethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Hexachlorobutadiene	< 5	5	1	ug/Kg	21-Dec-16
Iodomethane	< 5	5	1	ug/Kg	21-Dec-16
Isopropylbenzene	< 5	5	1	ug/Kg	21-Dec-16
m,p-Xylenes	< 10	10	1	ug/Kg	21-Dec-16
Methyl tert-butyl ether	< 5	5	1	ug/Kg	21-Dec-16
Methylene chloride	< 5	5	1	ug/Kg	21-Dec-16
n-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
n-Propylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Naphthalene	< 15	15	1	ug/Kg	21-Dec-16
o-Xylene	< 5	5	1	ug/Kg	21-Dec-16
sec-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Styrene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 3 (7.5 - 10')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-05A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyte	Reporting				Date Analyzed
	Result	Limit	DF	Units	
				ug/Kg	
tert-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Tetrachloroethene	< 5	5	1	ug/Kg	21-Dec-16
Toluene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,3-Dichloropropene	< 10	10	1	ug/Kg	21-Dec-16
Trichloroethene	< 5	5	1	ug/Kg	21-Dec-16
Trichlorofluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Vinyl chloride	< 2	2	1	ug/Kg	21-Dec-16

### Surrogate Recoveries

Analyte	Recovery	Control Limits
1,2-Dichloroethane-d4	88%	61—145
4-Bromofluorobenzene	105%	46—164
Dibromofluoromethane	83%	48—160
Toluene-d8	138%	54—163

For Surrogates: 0 = Dil. Out

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 4 (12.5 - 15')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-07A

### Volatile Organics by GC/MS

### SW8260B

**Analyst:** SS

Analyte	Result	Reporting Limit	DF	Units	Date Analyzed
1,1,1,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,1-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromo-3-chloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromoethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,3,5-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,4-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
2,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
2-Butanone	< 10	10	1	ug/Kg	21-Dec-16
2-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
2-Hexanone	< 10	10	1	ug/Kg	21-Dec-16
4-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Isopropyltoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Methyl-2-pentanone	< 10	10	1	ug/Kg	21-Dec-16
Acetone	< 10	10	1	ug/Kg	21-Dec-16
Benzene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 4 (12.5 - 15')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-07A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyst	Result	Reporting Limit	DF	Units	Date Analyzed
Bromobenzene	< 5	5	1	ug/Kg	21-Dec-16
Bromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromodichloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromoform	< 5	5	1	ug/Kg	21-Dec-16
Bromomethane	< 5	5	1	ug/Kg	21-Dec-16
Carbon disulfide	< 5	5	1	ug/Kg	21-Dec-16
Carbon tetrachloride	< 5	5	1	ug/Kg	21-Dec-16
Chlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
Chloroethane	< 5	5	1	ug/Kg	21-Dec-16
Chloroform	< 5	5	1	ug/Kg	21-Dec-16
Chloromethane	< 5	5	1	ug/Kg	21-Dec-16
cis-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
cis-1,3-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
Dibromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Dibromomethane	< 5	5	1	ug/Kg	21-Dec-16
Dichlorodifluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Ethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Hexachlorobutadiene	< 5	5	1	ug/Kg	21-Dec-16
Iodomethane	< 5	5	1	ug/Kg	21-Dec-16
Isopropylbenzene	< 5	5	1	ug/Kg	21-Dec-16
m,p-Xylenes	< 10	10	1	ug/Kg	21-Dec-16
Methyl tert-butyl ether	< 5	5	1	ug/Kg	21-Dec-16
Methylene chloride	< 5	5	1	ug/Kg	21-Dec-16
n-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
n-Propylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Naphthalene	< 15	15	1	ug/Kg	21-Dec-16
o-Xylene	< 5	5	1	ug/Kg	21-Dec-16
sec-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Styrene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 4 (12.5 - 15')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-07A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyte	Reporting				Date Analyzed
	Result	Limit	DF	Units	
				ug/Kg	
tert-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Tetrachloroethene	< 5	5	1	ug/Kg	21-Dec-16
Toluene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,3-Dichloropropene	< 10	10	1	ug/Kg	21-Dec-16
Trichloroethene	< 5	5	1	ug/Kg	21-Dec-16
Trichlorofluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Vinyl chloride	< 2	2	1	ug/Kg	21-Dec-16

### Surrogate Recoveries

Analyte	Recovery	Control Limits
1,2-Dichloroethane-d4	95%	61—145
4-Bromofluorobenzene	107%	46—164
Dibromofluoromethane	92%	48—160
Toluene-d8	143%	54—163

For Surrogates: 0 = Dil. Out

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 5 (5 - 7.5')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-08A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyte	Result	Reporting Limit	DF	Units	Date Analyzed
1,1,1,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,1-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromo-3-chloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromoethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,3,5-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,4-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
2,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
2-Butanone	< 10	10	1	ug/Kg	21-Dec-16
2-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
2-Hexanone	< 10	10	1	ug/Kg	21-Dec-16
4-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Isopropyltoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Methyl-2-pentanone	< 10	10	1	ug/Kg	21-Dec-16
Acetone	< 10	10	1	ug/Kg	21-Dec-16
Benzene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 5 (5 - 7.5')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-08A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyst	Result	Reporting Limit	DF	Units	Date Analyzed
Bromobenzene	< 5	5	1	ug/Kg	21-Dec-16
Bromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromodichloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromoform	< 5	5	1	ug/Kg	21-Dec-16
Bromomethane	< 5	5	1	ug/Kg	21-Dec-16
Carbon disulfide	< 5	5	1	ug/Kg	21-Dec-16
Carbon tetrachloride	< 5	5	1	ug/Kg	21-Dec-16
Chlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
Chloroethane	< 5	5	1	ug/Kg	21-Dec-16
Chloroform	< 5	5	1	ug/Kg	21-Dec-16
Chloromethane	< 5	5	1	ug/Kg	21-Dec-16
cis-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
cis-1,3-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
Dibromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Dibromomethane	< 5	5	1	ug/Kg	21-Dec-16
Dichlorodifluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Ethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Hexachlorobutadiene	< 5	5	1	ug/Kg	21-Dec-16
Iodomethane	< 5	5	1	ug/Kg	21-Dec-16
Isopropylbenzene	< 5	5	1	ug/Kg	21-Dec-16
m,p-Xylenes	< 10	10	1	ug/Kg	21-Dec-16
Methyl tert-butyl ether	< 5	5	1	ug/Kg	21-Dec-16
Methylene chloride	< 5	5	1	ug/Kg	21-Dec-16
n-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
n-Propylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Naphthalene	< 15	15	1	ug/Kg	21-Dec-16
o-Xylene	< 5	5	1	ug/Kg	21-Dec-16
sec-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Styrene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 5 (5 - 7.5')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-08A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyte	Reporting				Date Analyzed
	Result	Limit	DF	Units	
				ug/Kg	
tert-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Tetrachloroethene	< 5	5	1	ug/Kg	21-Dec-16
Toluene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,3-Dichloropropene	< 10	10	1	ug/Kg	21-Dec-16
Trichloroethene	< 5	5	1	ug/Kg	21-Dec-16
Trichlorofluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Vinyl chloride	< 2	2	1	ug/Kg	21-Dec-16

### Surrogate Recoveries

Analyte	Recovery	Control Limits
1,2-Dichloroethane-d4	85%	61—145
4-Bromofluorobenzene	101%	46—164
Dibromofluoromethane	80%	48—160
Toluene-d8	122%	54—163

For Surrogates: 0 = Dil. Out

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 6 (12.5 - 15')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-10A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyte	Result	Reporting Limit	DF	Units	Date Analyzed
1,1,1,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,1-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2,2-Tetrachloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1,2-Trichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
1,1-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,3-Trichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2,4-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromo-3-chloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dibromoethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloroethane	< 5	5	1	ug/Kg	21-Dec-16
1,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,3,5-Trimethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
1,3-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
1,4-Dichlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
2,2-Dichloropropane	< 5	5	1	ug/Kg	21-Dec-16
2-Butanone	< 10	10	1	ug/Kg	21-Dec-16
2-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
2-Hexanone	< 10	10	1	ug/Kg	21-Dec-16
4-Chlorotoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Isopropyltoluene	< 5	5	1	ug/Kg	21-Dec-16
4-Methyl-2-pentanone	< 10	10	1	ug/Kg	21-Dec-16
Acetone	< 10	10	1	ug/Kg	21-Dec-16
Benzene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 6 (12.5 - 15')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-10A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyst	Result	Reporting Limit	DF	Units	Date Analyzed
Bromobenzene	< 5	5	1	ug/Kg	21-Dec-16
Bromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromodichloromethane	< 5	5	1	ug/Kg	21-Dec-16
Bromoform	< 5	5	1	ug/Kg	21-Dec-16
Bromomethane	< 5	5	1	ug/Kg	21-Dec-16
Carbon disulfide	< 5	5	1	ug/Kg	21-Dec-16
Carbon tetrachloride	< 5	5	1	ug/Kg	21-Dec-16
Chlorobenzene	< 5	5	1	ug/Kg	21-Dec-16
Chloroethane	< 5	5	1	ug/Kg	21-Dec-16
Chloroform	< 5	5	1	ug/Kg	21-Dec-16
Chloromethane	< 5	5	1	ug/Kg	21-Dec-16
cis-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
cis-1,3-Dichloropropene	< 5	5	1	ug/Kg	21-Dec-16
Dibromochloromethane	< 5	5	1	ug/Kg	21-Dec-16
Dibromomethane	< 5	5	1	ug/Kg	21-Dec-16
Dichlorodifluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Ethylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Hexachlorobutadiene	< 5	5	1	ug/Kg	21-Dec-16
Iodomethane	< 5	5	1	ug/Kg	21-Dec-16
Isopropylbenzene	< 5	5	1	ug/Kg	21-Dec-16
m,p-Xylenes	< 10	10	1	ug/Kg	21-Dec-16
Methyl tert-butyl ether	< 5	5	1	ug/Kg	21-Dec-16
Methylene chloride	< 5	5	1	ug/Kg	21-Dec-16
n-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
n-Propylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Naphthalene	< 15	15	1	ug/Kg	21-Dec-16
o-Xylene	< 5	5	1	ug/Kg	21-Dec-16
sec-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Styrene	< 5	5	1	ug/Kg	21-Dec-16

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



**Client:** Drash Consultants, LLC  
**Work Order:** 1612077  
**Project Name:** 116G1164 Sterling - Commerce LSI

**Client Sample ID** B - 6 (12.5 - 15')

**Date:** 22-Dec-16  
**Date Received:** 17-Dec-16  
**Collection Date:** 16-Dec-16  
**Preparation Date:** 21-Dec-16

**Matrix:** SOIL  
**Lab ID:** 1612077-10A

### Volatile Organics by GC/MS

SW8260B

Analyst: SS

Analyte	Reporting				Date Analyzed
	Result	Limit	DF	Units	
				ug/Kg	
tert-Butylbenzene	< 5	5	1	ug/Kg	21-Dec-16
Tetrachloroethene	< 5	5	1	ug/Kg	21-Dec-16
Toluene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,2-Dichloroethene	< 5	5	1	ug/Kg	21-Dec-16
trans-1,3-Dichloropropene	< 10	10	1	ug/Kg	21-Dec-16
Trichloroethene	< 5	5	1	ug/Kg	21-Dec-16
Trichlorofluoromethane	< 5	5	1	ug/Kg	21-Dec-16
Vinyl chloride	< 2	2	1	ug/Kg	21-Dec-16

### Surrogate Recoveries

Analyte	Recovery	Control Limits
1,2-Dichloroethane-d4	92%	61—145
4-Bromofluorobenzene	102%	46—164
Dibromofluoromethane	88%	48—160
Toluene-d8	130%	54—163

For Surrogates: 0 = Dil. Out

Approved by:

### Report of Laboratory Analysis

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.

NELAP Certificate# San Antonio : T104704367-16-5



CLIENT: Drash Consultants, LLC

Work Order: 1612077

Project: 116G1164 Sterling - Commerce LSI

## QC SUMMARY REPORT

Analyte	%REC						%REC			RPD	Low - High		RPD				
	BLK	SPK value	LCS	LCSD	RPD %	RPD Limit	MS	MSD	%	Limit	Limit	Parent	DUP	%	Limit		
Batch ID: BTXS_GCMS-12/21/2016																	
	TestName: BTEX																
Run ID: BTEX1_161221A																	
	Test Code: SW8260B						Units: mg/Kg			Analysis Date: 12/21/2016			Prep Date: 12/21/2016				
Benzene	<0.005	0.05	102.7%	95.1%	8.000	30.0					57 - 142						
Toluene	<0.005	0.05	103.0%	109.7%	6.000	30.0					53 - 145						
Ethylbenzene	<0.005	0.05	108.7%	100.2%	8.000	30.0					66 - 142						
Xylenes, Total	<0.015	0.15	104.1%	96.8%	7.000	30.0					55 - 140						
Methyl tert-butyl ether	<0.005	0.05	102.5%	100.2%	2.000	30.0					54 - 170						
Batch ID: HG_R_S-12/22/2016																	
	TestName: MERCURY, TOTAL																
Run ID: HG_161221A																	
	Test Code: SW7471A						Units: mg/Kg			Analysis Date: 12/21/2016			Prep Date: 12/21/2016 8:30:00				
Mercury	<0.04	0.5	98.0%	96.0%	2.000	25.0	96.0%	94.0%	2.000	25.0	77 - 120						
Batch ID: PMOIST-12/19/2016																	
	TestName: PERCENT MOISTURE																
Run ID: BAL1_161219A																	
	Test Code: D2216						Units: wt%			Analysis Date: 12/20/2016 11:00:00 AM			Prep Date: 12/19/2016 5:45:00				
Percent Moisture														15.9	15.7	1.000	15.0
Batch ID: RCRA7_S-12/22/2016																	
	TestName: METALS-RCRA, Total																
Run ID: ICP_161222D																	
	Test Code: SW6010B						Units: mg/Kg			Analysis Date: 12/22/2016 1:00:00 PM			Prep Date: 12/21/2016 9:00:00				
Arsenic	<2.5	50	100.0%	99.8%	0.000	30.0	75.6%	73.2%	3.000	30.0	80 - 120						
Barium	<1	50	98.2%	96.8%	1.000	30.0	77.6%	84.6%	3.000	30.0	80 - 120						
Cadmium	<0.5	50	103.0%	103.8%	1.000	30.0	81.0%	83.0%	2.000	30.0	80 - 120						
Chromium	<0.5	50	98.4%	100.4%	2.000	30.0	76.6%	79.4%	2.000	30.0	80 - 120						
Lead	<1.5	50	101.4%	100.0%	1.000	30.0	77.6%	80.2%	2.000	30.0	80 - 120						
Selenium	<2	50	103.8%	100.6%	3.000	30.0	84.8%	86.8%	2.000	30.0	80 - 120						
Silver	<0.78	50	96.0%	96.4%	0.000	30.0	78.8%	79.2%	1.000	30.0	80 - 120						

Approved by:

## Laboratory QC Report

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.



CLIENT: Drash Consultants, LLC

Work Order: 1612077

Project: 116G1164 Sterling - Commerce LSI

## QC SUMMARY REPORT

Analyte	%REC					%REC					RPD	Low - High	RPD		
	BLK	SPK value	LCS	LCSD	RPD %	RPD Limit	MS	MSD	%	Limit	Limit	Parent	DUP	%	Limit
Batch ID: TPH1005_S-12/21/2016	TestName: TOTAL PETROLEUM HYDROCARBONS														
Run ID: TPH_161219B	Test Code: TX1005 Units: mg/Kg Analysis Date: 12/19/2016 Prep Date: 12/19/2016														
Hydrocarbons, C6-C12	<50	500	99.2%	81.2%	20.000	30.0	86.2%	80.2%	7.000	30.0	75 - 125				
Hydrocarbons, >C12-C28	<50	500	104.8%	116.6%	11.000	30.0	96.4%	118.6%	21.000	30.0	75 - 125				
Hydrocarbons, >C28-C35	<50														
Hydrocarbons, C6-C35	<50	1000	102.0%	98.9%	3.000	30.0	90.3%	99.4%	10.000	30.0	75 - 125				

Approved by:

## Laboratory QC Report

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.



**CLIENT:** Drash Consultants, LLC  
**Work Order:** 1612077

**Project:** 116G1164 Sterling - Commerce LSI

## QC SUMMARY REPORT

Analyte	%REC				%REC				RPD	Low - High		RPD			
	BLK	SPK value	LCS	LCSD	RPD %	RPD Limit	MS	MSD		%	Limit	Limit	Parent	DUP	%
Batch ID: VOC1_161221A															
Run ID: VOC1_161221A															
1,1,1,2-Tetrachloroethane	<5														
1,1,1-Trichloroethane	<5														
1,1,2,2-Tetrachloroethane	<5														
1,1,2-Trichloroethane	<5														
1,1-Dichloroethane	<5														
1,1-Dichloroethene	<5														
1,1-Dichloropropene	<5														
1,2,3-Trichlorobenzene	<5														
1,2,3-Trichloropropane	<5														
1,2,4-Trichlorobenzene	<5														
1,2,4-Trimethylbenzene	<5														
1,2-Dibromo-3-chloropropane	<5														
1,2-Dibromoethane	<5														
1,2-Dichlorobenzene	<5														
1,2-Dichloroethane	<5														
1,2-Dichloropropane	<5														
1,3,5-Trimethylbenzene	<5														
1,3-Dichlorobenzene	<5														
1,3-Dichloropropane	<5														
1,4-Dichlorobenzene	<5														
2,2-Dichloropropane	<5														
2-Butanone	<10														
2-Chlorotoluene	<5														
2-Hexanone	<10														
4-Chlorotoluene	<5														
4-Isopropyltoluene	<5														
4-Methyl-2-pentanone	<10														
Acetone	<10														
Benzene	<5	50		95.1%									57 - 142		

Approved by:

### Laboratory QC Report

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.



**CLIENT:** Drash Consultants, LLC  
**Work Order:** 1612077

**Project:** 116G1164 Sterling - Commerce LSI

## QC SUMMARY REPORT

Analyte	BLK	%REC			%REC			MS	MSD	%	RPD	Low - High		RPD	
		SPK value	LCS	LCSD	RPD %	RPD Limit	Limit					Parent	DUP	%	Limit
Bromobenzene		<5													
Bromochloromethane		<5													
Bromodichloromethane		<5													
Bromoform		<5													
Bromomethane		<5													
Carbon disulfide		<5													
Carbon tetrachloride		<5													
Chlorobenzene		<5	50	93.6%									61 - 134		
Chloroethane		<5													
Chloroform		<5													
Chloromethane		<5													
cis-1,2-Dichloroethene		<5													
cis-1,3-Dichloropropene		<5													
Dibromochloromethane		<5													
Dibromomethane		<5													
Dichlorodifluoromethane		<5													
Ethylbenzene		<5													
Hexachlorobutadiene		<5													
Iodomethane		<5													
Isopropylbenzene		<5													
m,p-Xylenes		<10													
Methyl tert-butyl ether		<5	50	91.1%									54 - 170		
Methylene chloride		<5													
n-Butylbenzene		<5													
n-Propylbenzene		<5													
Naphthalene		<15													
o-Xylene		<5													
sec-Butylbenzene		<5													
Styrene		<5													
tert-Butylbenzene		<5													
Tetrachloroethene		<5													
Toluene		<5	50	109.7%									53 - 145		
trans-1,2-Dichloroethene		<5													

Approved by:

### Laboratory QC Report

Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.



CLIENT: Drash Consultants, LLC

Work Order: 1612077

Project: 116G1164 Sterling - Commerce LSI

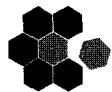
**QC SUMMARY REPORT**

Analyte	BLK	%REC			%REC			RPD	Low - High		Parent	DUP	%	RPD
		SPK value	LCS	LCSD	RPD %	RPD Limit	MS		MSD	%				
trans-1,3-Dichloropropene	<10													
Trichloroethene	<5	50	96.2%								61 - 133			
Trichlorofluoromethane	<5													
Vinyl chloride	<2													

Approved by:

**Laboratory QC Report**

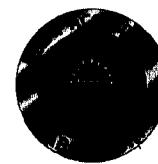
Note: The analysis contained in this report applies only to the samples tested and for the exclusive use of the addressed client. Reproduction of this report wholly or in part requires written permission of the client.



ALAMO ANALYTICAL  
LABORATORIES LTD.

CHAIN OF CUSTODY  
RECORD

COC#: 023558



MUST BE COMPLETED BY CLIENT

Alamo's Client: <i>Drash Consultants, Inc</i>	Client's P.O. #: <i>116E 1164</i>	Turnaround time: Standard(7) <input type="checkbox"/> (in working days)
Project Manager: <i>Paul Beckett</i>	Phone #: <i>210-340-5004</i>	RUSH: 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3-5 <input checked="" type="checkbox"/> Days (additional charges)
Address: <i>1045 Central Pkwy N, Ste. 103, San Antonio, TX</i>	Fax #:	TRRP 13 Report: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (additional charges)
Project Number: <i>116E 1164</i>	Project Name: <i>Sterling-Commerce LSI</i>	Analysis for Permit Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Project Location: <i>San Antonio, TX</i>	Sampler Signature:	DMR Form Required: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Main Office: 10526 Gulfdale  
San Antonio, Texas 78216  
(210) 340-8121 • Fax (210) 340-8123

Branch: 2500 Montana Avenue  
El Paso, Texas 79903  
(915) 599-2182

[www.alamoanalytical.com](http://www.alamoanalytical.com)  
admin@alamoanalytical.com

LAB ID# (Do not use)	Sampling		Composite	Grab	Matrix	FIELD ID#	FIELD DESCRIPTION	No. of Containers	ANALYSIS				REMARKS (Preservation, Size/Amount, Etc.)
	Date	Time							TPH				
1612077-01	12/16	1036	X	SO	B-1(6-5')		5	X	X	X			Rpt MTBE w/ 10C
-02	1	1120	X	SO	B-2(4-6')		5	X		X	X		
-03	1	1148	X	SO	B-2(8-10')		5	X	X	X			Rpt MTBE
-04	1	1431	X	SO	B-3(2.5-5')		5	X		X	X		
-05	1	1436	X	SO	B-3(7.5-10')		5	X	X	X			Rpt MTBE
-06	1	1500	X	SO	B-4(5-7.5')		5	X		X	X		
-07	1	1506	X	SO	B-4(12.5-15')		5	X	X	X			Rpt MTBE
-08	1	1523	X	SO	B-5(5-7.5')		5	X	X	X			Rpt MTBE
-09	1	1535	X	SO	B-5(12.5-15')		5	X		X	X		
-10	1	1603	X	SO	B-6(12.5-15')		5	X	X	X			Rpt MTBE
Relinquished by: (Signature / Print Name)				Date	Time	Received by: (Signature)		Headspace				If Yes, Amt. <i>N/A</i>	
<i>R1266</i>				12/17/16	1000								
Relinquished by: (Signature / Print Name)				Date	Time	Received by: (Signature)		Properly Sealed <input checked="" type="checkbox"/>				If No, Explain <i> </i>	
Relinquished by: (Signature / Print Name)				Date	Time	Received by: (Signature)		Chilled ≤4°C <input checked="" type="checkbox"/>				If No, Temp. <i>3.1 C</i>	
Relinquished by: (Signature / Print Name)				Date	Time	Received by: (Signature)		Comments: <i> </i>					



# ALAMO ANALYTICAL LABORATORIES, LTD.

10526 Gulfdale  
San Antonio, TX - 78216;  
Ph. (210) 340-8121; Fax: (210) 340-8123

[www.alamoanalytical.com](http://www.alamoanalytical.com)

2500 Montana Avenue  
El Paso, TX - 79903  
Ph. (915) 599-2182

## Sample Log-In Checklist

DATE: 12/17/2016

TIME: 10:10

INITIALS: LS

CLIENT: Deash

PROJECT: W.O# 1612077

1. Is a Chain of Custody present?

Yes

No

2. Is a Chain of Custody properly completed?

Yes

No

3. Are custody seals present?

Yes

No

If yes, are they intact?

Yes

No

Are they on: Sample \_\_\_\_\_

or on

Shipping Container \_\_\_\_\_

4. Are all samples tagged or labeled?

Yes

No

If yes, do the labels match the Chain of Custody?

Yes

No

5. Do all shipping documents agree (i.e., number of coolers arrived vs. on tickets)

If not, describe below.

Yes

No

(N/A)

6. Are samples preserved properly? If not, describe below.

Yes

No

7. Are all samples within holding times on arrival?

Yes

No

If not, describe below.

8. Condition of shipping container: Intact ✓ or \_\_\_\_\_

9. Condition of samples: Intact ✓ or \_\_\_\_\_

10. Temperature of samples: Temp. (°C): 3.1 Corrected Temp. (°C): \_\_\_\_\_ Thermometer ID: DT1 or L2

11. pH strip lot#: ✓ Samples out of pH range: \_\_\_\_\_

12. Delivery agent: Client ✓ UPS \_\_\_\_\_ Fed-Ex \_\_\_\_\_ Lone Star \_\_\_\_\_ Alamo P/U \_\_\_\_\_ Other \_\_\_\_\_

13. Sample disposal: Return to client \_\_\_\_\_ Alamo Analytical Disposal ✓

**Comments:** (Reference checklist item number from above, or for comments on resolution below):

*See D*

### Record of contacting client for resolution of sample discrepancies (first and retry contact)

#### Contacted How?

Name: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_  
Name: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_