

January 31, 2020

New Era Life Insurance Company
Lisa Wang
11720 Katy Freeway, #1700
Houston, TX 77079

I. Project Identification

Property Address:
100 East Little York Road
Houston, Harris County, Texas 77076

Consultant Name and Project Number:

Phase Engineering, Inc.
Report # 202001046

II. Property Use

The subject property currently consists of a multi-tenant retail center (including an unoccupied dry cleaners) and party hall.

III. Purpose

The purpose of this Limited Phase II Environmental Site Assessment is to investigate the potential for soil and groundwater contamination in association with potential undocumented releases from the suspected former onsite dry cleaning plant.

IV. Background

Phase Engineering, Inc. prepared a Phase I Environmental Site Assessment (ESA) dated January 6, 2020 for the subject property. The following is a general summary of the findings and opinion associated with the recognized environmental condition (REC) identified in connection with the subject property during the Phase I ESA:

- *"Dry cleaners formerly operated at the subject property.*
- *The subject property addressed as 100 East Little York Road under the names Yorkline Plaza, Airline Cleaners and Pilgrim Cleaners is listed as a dry cleaner and IHW registration and reporting facility. The following are summaries of the regulatory agency listings associated with the subject property:*
 - o **DCR #11019** - *This facility is reported to be a drop station only facility. Dry cleaning activities are not conducted at drop stations. No reported releases were found in connection with this facility.*
 - o **IHW #51123** - *This facility has an IHW status of "Inactive" and is not undergoing corrective action. No IHW waste streams or waste management units were reported in connection with this facility. No reported releases were found in connection with this facility.*
- *Street directories indicate that the subject property addressed as 100 East Little York Road has been occupied by dry cleaning operations under the names Airline Cleaners and Pilgrim Launderers and Cleaners since the early-1970s. Historically, dry cleaners are likely sources of soil and/or groundwater contamination from disposal of dry cleaning fluids, in particular perchloroethylene and other related products. No reported releases were found in connection with this facility during records review conducted for this assessment.*
- *The subject property addressed as 100 East Little York Road was occupied by a multi-tenant retail center with the Airline Cleaners suite observed to be vacant at the time of the site visit.*

Multiple indications of possible dry cleaning operations were observed inside the former Airline Cleaners suite that consist of the following:

- o large sink basin
- o sumps
- o possible vent pipes
- o footprint of heavy machinery
- o footprint of unknown circular feature

No evidence of a hazardous substance or petroleum product release was noted to have been observed.

- Phase Engineering, Inc. has the opinion that based on the time frame that these dry cleaners occupied the subject property; the likelihood of dry cleaning solvents used during spot cleaning; and site observations (sink basin, sumps, possible vent pipes, footprint of heavy machinery and unknown circular feature) this facility may have impacted the subject property."

V. Scope of Investigations

The investigation consisted of installation of three (3) soil borings utilizing push technology (DPT) with a track-mounted Geoprobe, conversion of each soil boring into a temporary groundwater monitoring well, and collection of selected soil and groundwater samples for laboratory analysis on January 24, 2020.

It is the opinion of Phase Engineering, Inc. that the scope and character of the environmental report and services and the investigation performed were sufficient to justify the conclusions reached in light of the character of the property and the results of tests performed. Phase Engineering, Inc. has used methodologies that conform to standards established by the EPA, appropriate state environmental protection agencies under similar budget and time constraints, good and customary practices and laboratory standards for this kind of work. Soil and groundwater samples collected and analyzed as part of this limited assessment are indicative of only those areas sampled.

Sample locations / rationale are summarized in the following table:

TABLE 1: SAMPLE LOCATIONS / RATIONALE	
Sample #	Location / Rationale
SB-1 / TMW-1	Northwest portion of subject property, west exterior of onsite building / proximate to suspected dry cleaner plant area
SB-2 / TMW-2	Near center of north portion of subject property, east exterior of onsite building / proximate to dry cleaner facility
SB-3 / TMW-3	Northwest portion of subject property, north exterior of onsite building / proximate to dry cleaner facility

See the included Sample Location Map for sample locations.

VI. Soil Investigation Details

Investigation activities included use of direct push technology (DPT). Each soil core was collected from Shelby tubes with disposable plastic liners and handled using clean, disposable nitrile gloves. The soil samples from each interval were collected into disposable plastic bags, sealed, and allowed to equilibrate (allowing vapor concentrations between the soil and headspace in the bag to equalize) prior to Organic Vapor Meter (OVM) screening. Soil grab samples were collected directly from the soil sample liners and handled with clean, disposable nitrile gloves. Selected soil samples were collected into appropriate sample containers via EPA method 5035 and preserved on ice for transport to ALS Environmental for the following laboratory analyses:

TABLE A: SOIL SAMPLE LABORATORY ANALYSIS SELECTION			
Sample #	Depth	Analytical Method	
		VOCs (EPA 5035, 8260)	TPH (Texas 1005)
SB-1	4-6' bgs	☒	☒
SB-2	4-8' bgs	☒	☒
SB-3	4-8' bgs	☒	☒

The following table summarizes field screening results collected during investigation activities:

TABLE 2: FIELD SCREENING SUMMARY				
Sample #	Visual / Olfactory Release Indicator	Visual / Olfactory Indicator Depth	Highest OVM Depth	Highest OVM Reading
SB-1	None	N/A	N/A	All <1.0 ppm
SB-2	None	N/A	N/A	All <1.0 ppm
SB-3	None	N/A	N/A	All <1.0 ppm

The following table summarizes rationale utilized for selection of soil samples for laboratory analysis:

TABLE 3: SOIL SAMPLE SELECTION RATIONALE SUMMARY		
Sample #	Depth	Rationale
SB-1	4-6' bgs	Evaluation of potential past near surface releases / lack of elevated OVM readings
SB-2	4-8' bgs	Evaluation of potential past near surface releases / lack of elevated OVM readings
SB-3	4-8' bgs	Evaluation of potential past near surface releases / lack of elevated OVM readings

VII. Groundwater Investigation Details

A groundwater bearing unit (GWB) was encountered during soil boring installation activities at depths greater than 20' bgs. The soil borings were converted into temporary groundwater monitoring wells (TMW-1, TMW-2, and TMW-3). Depth-to-groundwater measurements were collected prior to purging and prior to sample collection. An adequate amount of groundwater volume was purged from each temporary groundwater monitoring well in an effort to provide a representative groundwater sample. Groundwater was allowed to recharge to at least 90% of the initial static water level prior to sample collection. The groundwater samples were collected into appropriate sample containers using a peristaltic pump and dedicated, disposable tubing. Groundwater samples were preserved on ice for transport to ALS Environmental for the following laboratory analyses:

TABLE B: GROUNDWATER SAMPLE LABORATORY ANALYSIS SELECTION		
Sample #	Analytical Method	
	VOCs (EPA 8260)	TPH (Texas 1005)
TMW-1	☒	☒
TMW-2	☒	☒
TMW-3	☒	☒

VIII. Laboratory Report Review

A review of the laboratory analytical report for quality assurance / quality control indicators indicates that the soil and groundwater data are generally acceptable and usable for this limited Phase II assessment. Recoveries were typically within acceptable ranges and no contaminants were detected in any of the blank samples. No significant anomalies were noted.

IX. Findings

GROUNDWATER LABORATORY RESULTS

- Five (5) VOC constituents, specifically acetone, bromodichloromethane, bromoform, dibromochloromethane, and tetrachloroethene, were detected in groundwater samples collected from TMW-1 or TMW-2 at concentrations that are less than their respective Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) Tier 1 Protective Concentration Levels (PCLs) for groundwater.

No other VOC constituents were detected in any of the groundwater samples collected for laboratory analysis at concentrations greater than their respective laboratory reporting limits (RLs).

2. No TPH ranges were detected in any of the groundwater samples collected for laboratory analysis at concentrations greater than their respective laboratory RLs.

Groundwater analytical results are summarized in the attached table and laboratory report.

SOIL LABORATORY RESULTS

1. No VOC constituents were detected in the soil samples selected for laboratory analysis at concentrations greater than their respective laboratory RLs.
2. No TPH ranges were detected in the soil samples selected for laboratory analysis at concentrations greater than their respective laboratory RLs.

Soil analytical results are summarized in the attached table and laboratory report.

X. Conclusions and Opinions

Phase Engineering, Inc. is offering the following conclusions and opinions based on the results of the field screening observations noted during sample collection activities and the reported laboratory results:

- No indication of a reportable chlorinated solvent or petroleum product related dry cleaner release was identified to have occurred to the underlying soil or groundwater at this time in the areas evaluated during this assessment.

No indication of a release subject to reporting under TRRP regulations appears to have occurred at this time as a result of former onsite dry cleaner operations.

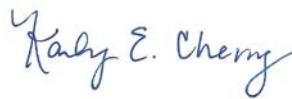
XI. Recommendations

No further investigation appears to be warranted at this time based on the investigation results associated with areas evaluated during this assessment.

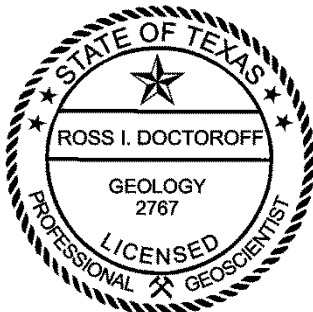
Thank you for using the environmental professional services of Phase Engineering, Inc. If you should have any questions, please contact us at 832-485-2238 or (832) 485-2230.



Ross Doctoroff, Texas P.G. #2767
Vice President



Karly E. Cherry
Senior Technical Manager





Sources: HCAD, USGS EarthExplorer, ESRI

0 37.5 75 150 225 300 Feet

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Sample Locations - January 24, 2020

◆ Soil Boring / Temporary Monitoring Well Locations

□ Subject Property

PEI Project No: 202001046

SOIL ANALYTICAL RESULTS

ANALYTE	TRRP Tier 1 PCLs	TRRP Tier 1 PCLs	SB-1 4-6	SB-2 4-8	SB-3 4-8
	^{TOI} SOIL _{COMB} mg/kg	^{GW} SOIL _{ING} mg/kg	1/24/2020 mg/kg	1/24/2020 mg/kg	1/24/2020 mg/kg
VOCs (EPA 8260)					
1,1,1-Trichloroethane	53000	1.6	<0.0044	<0.0041	<0.0045
1,1,2,2-Tetrachloroethane	30	0.023	<0.0044	<0.0041	<0.0045
1,1,2-Trichlor-1,2,2-trifluoroethane	74000	80000	<0.0044	<0.0041	<0.0045
1,1,2-Trichloroethane	18	0.02	<0.0044	<0.0041	<0.0045
1,1-Dichloroethane	11000	18	<0.0044	<0.0041	<0.0045
1,1-Dichloroethene	2300	0.05	<0.0044	<0.0041	<0.0045
1,2,4-Trichlorobenzene	120	4.8	<0.0044	<0.0041	<0.0045
1,2-Dibromo-3-chloropropane	0.15	0.0017	<0.0044	<0.0041	<0.0045
1,2-Dibromoethane	2.5	0.00021	<0.0044	<0.0041	<0.0045
1,2-Dichlorobenzene	720	18	<0.0044	<0.0041	<0.0045
1,2-Dichloroethane	41	0.014	<0.0044	<0.0041	<0.0045
1,2-Dichloropropane	61	0.023	<0.0044	<0.0041	<0.0045
1,3-Dichlorobenzene	120	6.7	<0.0044	<0.0041	<0.0045
1,4-Dichlorobenzene	250	2.1	<0.0044	<0.0041	<0.0045
2-Butanone	40000	29	<0.0088	<0.0083	<0.0091
2-Hexanone	270	0.32	<0.0088	<0.0083	<0.0091
4-Methyl-2-pentanone	5900	4.9	<0.0088	<0.0083	<0.0091
Acetone	66000	43	<0.018	<0.017	<0.018
Benzene	120	0.026	<0.0044	<0.0041	<0.0045
Bromodichloromethane	98	0.065	<0.0044	<0.0041	<0.0045
Bromoform	400	0.63	<0.0044	<0.0041	<0.0045
Bromomethane	46	0.13	<0.0088	<0.0083	<0.0091
Carbon disulfide	4600	14	<0.0088	<0.0083	<0.0091
Carbon tetrachloride	35	0.062	<0.0044	<0.0041	<0.0045
Chlorobenzene	520	1.1	<0.0044	<0.0041	<0.0045
Chloroethane	27000	31	<0.0088	<0.0083	<0.0091
Chloroform	16	1	<0.0044	<0.0041	<0.0045
Chloromethane	140	0.41	<0.0088	<0.0083	<0.0091
cis-1,2-Dichloroethene	140	0.25	<0.0044	<0.0041	<0.0045
cis-1,3-Dichloropropene	8	0.0066	<0.0044	<0.0041	<0.0045
Cyclohexane	75000	5900	<0.0044	<0.0041	<0.0045
Dibromochloromethane	72	0.049	<0.0044	<0.0041	<0.0045
Dichlorodifluoromethane	1400	240	<0.0044	<0.0041	<0.0045
Ethylbenzene	6400	7.6	<0.0044	<0.0041	<0.0045
Isopropylbenzene	4300	350	<0.0044	<0.0041	<0.0045
m,p-Xylene	N/A	N/A	<0.0088	<0.0083	<0.0091
Methyl acetate	82000	49	<0.0044	<0.0041	<0.0045
Methyl tert-butyl ether	800	0.62	<0.0044	<0.0041	<0.0045
Methylcyclohexane	41000	16000	<0.0044	<0.0041	<0.0045
Methylene chloride	1600	0.013	<0.0088	<0.0083	<0.0091
o-Xylene	48000	71	<0.0044	<0.0041	<0.0045
Styrene	6700	3.3	<0.0044	<0.0041	<0.0045
Tetrachloroethene	710	0.05	<0.0044	<0.0041	<0.0045
Toluene	5900	8.2	<0.0044	<0.0041	<0.0045
trans-1,2-Dichloroethene	590	0.49	<0.0044	<0.0041	<0.0045
trans-1,3-Dichloropropene	36	0.036	<0.0044	<0.0041	<0.0045
Trichloroethene	18	0.034	<0.0044	<0.0041	<0.0045
Trichlorofluoromethane	25000	130	<0.0044	<0.0041	<0.0045
Vinyl chloride	3.7	0.022	<0.0018	<0.0017	<0.0018
Xylenes, Total	6000	120	<0.0044	<0.0041	<0.0045
TPH (TX 1005)					
>nC12 to nC28	2300	200	<44	<46	<44
>nC28 to nC35	2300	200	<44	<46	<44
nC6 to nC12	1600	65	<44	<46	<44

GROUNDWATER ANALYTICAL RESULTS

ANALYTE	TRRP Tier 1 PCLs GW mg/L	TMW-1 1/24/2020 mg/L	TMW-2 1/24/2020 mg/L	TMW-3 1/24/2020 mg/L
VOCs (EPA 8260)				
1,1,1-Trichloroethane	0.2	<0.0010	<0.0010	<0.0010
1,1,2,2-Tetrachloroethane	0.0046	<0.0010	<0.0010	<0.0010
1,1,2-Trichlor-1,2,2-trifluoroethane	730	<0.0010	<0.0010	<0.0010
1,1,2-Trichloroethane	0.005	<0.0010	<0.0010	<0.0010
1,1-Dichloroethane	4.9	<0.0010	<0.0010	<0.0010
1,1-Dichloroethene	0.007	<0.0010	<0.0010	<0.0010
1,2,4-Trichlorobenzene	0.07	<0.0010	<0.0010	<0.0010
1,2-Dibromo-3-chloropropane	0.0002	<0.0010	<0.0010	<0.0010
1,2-Dibromoethane	0.00005	<0.0010	<0.0010	<0.0010
1,2-Dichlorobenzene	0.6	<0.0010	<0.0010	<0.0010
1,2-Dichloroethane	0.005	<0.0010	<0.0010	<0.0010
1,2-Dichloropropane	0.005	<0.0010	<0.0010	<0.0010
1,3-Dichlorobenzene	0.73	<0.0010	<0.0010	<0.0010
1,4-Dichlorobenzene	0.075	<0.0010	<0.0010	<0.0010
2-Butanone	15	<0.0020	<0.0020	<0.0020
2-Hexanone	0.12	<0.0020	<0.0020	<0.0020
4-Methyl-2-pentanone	2	<0.0020	<0.0020	<0.0020
Acetone	22	0.0082	<0.0020	<0.0020
Benzene	0.005	<0.0010	<0.0010	<0.0010
Bromodichloromethane	0.015	0.0017	<0.0010	<0.0010
Bromoform	0.12	0.0030	<0.0010	<0.0010
Bromomethane	0.034	<0.0010	<0.0010	<0.0010
Carbon disulfide	2.4	<0.0020	<0.0020	<0.0020
Carbon tetrachloride	0.005	<0.0010	<0.0010	<0.0010
Chlorobenzene	0.1	<0.0010	<0.0010	<0.0010
Chloroethane	9.8	<0.0010	<0.0010	<0.0010
Chloroform	0.24	<0.0010	<0.0010	<0.0010
Chloromethane	0.07	<0.0010	<0.0010	<0.0010
cis-1,2-Dichloroethene	0.07	<0.0010	<0.0010	<0.0010
cis-1,3-Dichloropropene	0.0017	<0.0010	<0.0010	<0.0010
Cyclohexane	120	<0.0010	<0.0010	<0.0010
Dibromochloromethane	0.011	0.0033	<0.0010	<0.0010
Dichlorodifluoromethane	4.9	<0.0010	<0.0010	<0.0010
Ethylbenzene	0.7	<0.0010	<0.0010	<0.0010
Isopropylbenzene	2.4	<0.0010	<0.0010	<0.0010
m,p-Xylene	N/A	<0.0020	<0.0020	<0.0020
Methyl acetate	24	<0.0010	<0.0010	<0.0010
Methyl tert-butyl ether	0.24	<0.0010	<0.0010	<0.0010
Methylcyclohexane	120	<0.0010	<0.0010	<0.0010
Methylene chloride	0.005	<0.0020	<0.0020	<0.0020
o-Xylene	10	<0.0010	<0.0010	<0.0010
Styrene	0.1	<0.0010	<0.0010	<0.0010
Tetrachloroethene	0.005	<0.0010	0.0012	<0.0010
Toluene	1	<0.0010	<0.0010	<0.0010
trans-1,2-Dichloroethene	0.1	<0.0010	<0.0010	<0.0010
trans-1,3-Dichloropropene	0.0091	<0.0010	<0.0010	<0.0010
Trichloroethene	0.005	<0.0010	<0.0010	<0.0010
Trichlorofluoromethane	7.3	<0.0010	<0.0010	<0.0010
Vinyl chloride	0.002	<0.0010	<0.0010	<0.0010
Xylenes, Total	10	<0.0010	<0.0010	<0.0010
TPH (TX 1005)				
>nC12 to nC28	0.98	<0.48	<0.48	<0.48
>nC28 to nC35	0.98	<0.48	<0.48	<0.48
nC6 to nC12	0.98	<0.48	<0.48	<0.48

CLIENT New Era Life Insurance Company

PROJECT NAME
PROJECT NUMBER 202001046

PROJECT LOCATION 100 E Little York Road

DATE STARTED 1/24/20

COMPLETED 1/24/20

GROUND ELEVATION
HOLE SIZE 2 inches

DRILLING CONTRACTOR MEDI

GROUND WATER LEVELS:
DRILLING METHOD Push Core

AT TIME OF DRILLING ---

LOGGED BY Cristina Martinez

CHECKED BY Ross Doctoroff

AT END OF DRILLING ---

NOTES
▼ AFTER DRILLING 22.60 ft

ENVIRONMENTAL BH - GINT STD US LAB.GDT - 1/28/20 17:02 - S:\REMEDIATION_PROJECTS\SOIL BORINGS\BORING LOGS\TEMPORARY WELLS\100 E LITTLE YORK GP.J

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0						
1.0					ASPHALT	
2.0			PID = 0		(CL) dark gray, clay, stiff, dry	
3.0					(CL) dark gray, clay, soft, moist	
4.0						
5.0	ST				(CL) light gray, clay, medium soft, moist	
6.0			PID = 0.3			
7.0					(CL) light gray, sandy clay, medium stiff, moist, with black streaks	
8.0					(CL) light gray, clay, medium soft, moist	
9.0			PID = 0			
10.0						
11.0						
12.0			PID = 0		(CL) orangish-red, light gray, sandy clay, stiff, less moist	
13.0						
14.0			PID = 0			
15.0						
16.0					(CL) red, light gray, clay, stiff, less moist to dry	
17.0					(CL) red, light, gray, clay, medium stiff, less moist	
18.0			PID = 0.1			
19.0						
20.0					(SW) light gray, gray, brown, clayey sand, soft, wet	
21.0			PID = 0			
22.0					▼	
23.0					(CL) light gray, brown, clay, soft, moist	
24.0			PID = 0.1		(CL) red, light gray, clay, stiff, dry	
25.0					(CL) red, light gray, clay, medium stiff, moist	
26.0					(CL) red, light gray, clay, stiff, dry	
27.0			PID = 0		(CL) red, light gray, sandy clay, soft, moist	
28.0						

3/4" solid PVC riser

 3/4" 0.010 gauge
slotted PVC

Bottom of borehole at 28.0 feet.


 1/27/2020


CLIENT New Era Life Insurance Company

PROJECT NAME

PROJECT NUMBER 202001046

PROJECT LOCATION 100 E Little York Road

DATE STARTED 1/24/20

COMPLETED 1/24/20

GROUND ELEVATION

HOLE SIZE 2 inches

DRILLING CONTRACTOR MEDI

GROUND WATER LEVELS:

DRILLING METHOD Push Core

AT TIME OF DRILLING ---

LOGGED BY Cristina Martinez

CHECKED BY Ross Doctoroff

AT END OF DRILLING ---

NOTES

AFTER DRILLING 22.90 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0						
					1.0 NO CORE	
					1.5 (CL) light brown, red, clay, soft, moist	
			PID = 0.1		2.0 ASPHALT	
					4.0 (CL) dark brown, silty clay, soft, moist	
					(CL) light brown, clay, soft, moist	
			PID = 0.1		7.0	
					8.0 (CL) light brown, clay, soft, moist, with black streaks	
					(CL) light brown, orangish-brown, silty clay, soft, wet	
10			PID = 0.2		12.0	
					(CL) yellowish-orange, light brown, sandy clay, medium to hard, less moist	
			PID = 0.1		16.0	
					(CL) light brown, orangish-red, silty clay, medium stiff, moist	
			PID = 0.3		18.0	
					19.0 (CL) red, clay, hard, dry	
20			PID = 0.4		20.0 (CL) red, clay, hard, dry, with black streaks	
					(CL) red, gray, sandy clay, medium to hard, slightly moist	
			PID = 0.5		22.0	
					∇ (CL) red, gray, sandy clay, hard, dry	
			PID = 0		24.0	
					25.0 (CL) light brown, gray, clay, hard, dry	
					26.0 (CL) brown, gray, clay, soft, slightly moist	
					(CL) red, light gray, clay, medium, slightly moist	
			PID = 0.5		27.5	
					28.0 (CL) red, light gray, sandy clay, hard, dry	
					29.0 (CL) orange, brown, gray, silty clay, saturated, very soft	
30			PID = 0.5		30.0	
					(CL) orange, brown, gray, silty clay, dry, medium stiff	
					(CL) red, light brown, gray, sandy clay, hard, dry	
			PID = 0.2		32.0	

Bottom of borehole at 32.0 feet.

1/27/2020

1/27/2020



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CLIENT New Era Life Insurance Company

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PROJECT LOCATION 100 E Little York Road

DATE STARTED 1/24/20

COMPLETED 1/24/20

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HOLE SIZE 2 inches

DRILLING CONTRACTOR MEDI

GROUND WATER LEVELS:
DRILLING METHOD Push Core

AT TIME OF DRILLING ---

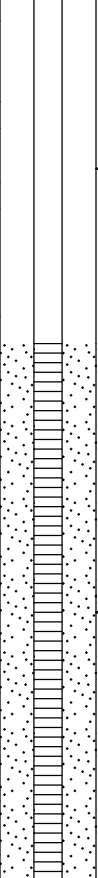
LOGGED BY Cristina Martinez

CHECKED BY Ross Doctoroff

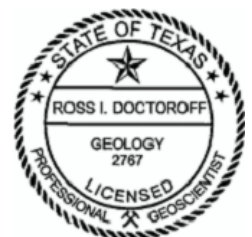
AT END OF DRILLING ---

NOTES
▼ AFTER DRILLING 19.00 ft

ENVIRONMENTAL BH - GINT STD US LAB.GDT - 1/28/20 17:02 - S:\REMEDIATION_PROJECTS\SOIL BORINGS\BORING LOGS\TEMPORARY WELLS\100 E LITTLE YORK GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0						
	ST		PID = 0.2		1.0 ASPHALT (SW) brown, sand, soft, moist	
			PID = 0.3		4.0 (SW) brown, sand, soft, moist 5.0 (CL) light brown, sandy clay, soft to medium, moist 7.0 (CL) light brown, sandy clay, soft to medium, moist, with black streaks 8.0 (CL) light brown, red, clayey sand, medium, more moist, with black streaks	
10			PID = 0.4		(CL) light brown, red, clayey sand, medium, more moist, with black streaks 12.0 (CL) orangish-red, tan, sandy clay, stiff, dry, with black streaks	
			PID = 0.4		16.0 (CL) orangish-red, tan, sandy clay, stiff, dry	
			PID = 0.4		18.0 (CL) red, clay, stiff, dry	
20			PID = 0.4		20.0 (CL) red, brown, clay, stiff, dry	
			PID = 0.2		22.0 (CL) red, tan, silty clay, medium to stiff, dry	
			PID = 0.2		24.0 (CL) red, brown, clay, stiff, dry, very brittle at 25-26	
			PID = 0.3		26.0 (CL) tan, reddish-orange, clay, medium stiff, slightly moist to dry	
			PID = 0.2		28.0 (CL) red, tan, clay, stiff, dry	
30			PID = 0.2		28.5 (CL) red, tan, soft, silty clay, very moist 30.0 (CL) red, tan, silty clay, soft to medium, wet	
			PID = 0.2		32.0 (CL) red, light gray, tan, clay, stiff, dry	
			PID = 0.3		33.0 (CL) red, light gray, tan, clay, stiff, dry	

Bottom of borehole at 33.0 feet.


 1/27/2020




10450 Stancliff Rd. Suite 210
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January 30, 2020

Ross Doctoroff
Phase Engineering, Inc.
5524 Cornish Street
Houston, TX 77007

Work Order: **HS20011129**

Laboratory Results for: **100 East Little York Road**

Dear Ross,

ALS Environmental received 6 sample(s) on Jan 24, 2020 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: Phase Engineering, Inc.
Project: 100 East Little York Road
Work Order: HS20011129

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS20011129-01	SB-1 4-6	Soil		24-Jan-2020 09:20	24-Jan-2020 15:40	☐
HS20011129-02	SB-2 4-8	Soil		24-Jan-2020 11:10	24-Jan-2020 15:40	☐
HS20011129-03	SB-3 4-8	Soil		24-Jan-2020 13:50	24-Jan-2020 15:40	☐
HS20011129-04	TMW-1	Water		24-Jan-2020 12:05	24-Jan-2020 15:40	☐
HS20011129-05	TMW-2	Water		24-Jan-2020 12:00	24-Jan-2020 15:40	☐
HS20011129-06	TMW-3	Water		24-Jan-2020 13:25	24-Jan-2020 15:40	☐

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
Work Order: HS20011129

CASE NARRATIVE

Work Order Comments

- Login notes:

Depths Differ on sample SB-1, COC lists "4-6" Labels list "4-8". Reported depth from COC.
SB-2 4-8 labels missing depths

GC Semivolatiles by Method TX1005**Batch ID: 150001**

Sample ID: LCSD-150001

- LCSD RPD was above the upper control limit. The individual recoveries were in control. (>nC12 to nC28)

Batch ID: 150002

Sample ID: HS20011081-01MS

- MS and MSD are for an unrelated sample (>nC12 to nC28)

GCMS Volatiles by Method SW8260**Batch ID: R355150**

Sample ID: HS20010958-02MS

- MS and MSD are for an unrelated sample

Batch ID: R355233

Sample ID: HS20011264-01MS

- MS and MSD are for an unrelated sample

WetChemistry by Method SW3550**Batch ID: R355350**

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: SB-1 4-6
 Collection Date: 24-Jan-2020 09:20

ANALYTICAL REPORT

WorkOrder:HS20011129
 Lab ID:HS20011129-01
 Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260		Analyst: WLR		
1,1,1-Trichloroethane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,1,2,2-Tetrachloroethane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,1,2-Trichloroethane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,1-Dichloroethane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,1-Dichloroethene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,2,4-Trichlorobenzene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,2-Dibromo-3-chloropropane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,2-Dibromoethane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,2-Dichlorobenzene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,2-Dichloroethane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,2-Dichloropropane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,3-Dichlorobenzene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
1,4-Dichlorobenzene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
2-Butanone	ND		0.0088	mg/Kg-dry	1	28-Jan-2020 22:26
2-Hexanone	ND		0.0088	mg/Kg-dry	1	28-Jan-2020 22:26
4-Methyl-2-pentanone	ND		0.0088	mg/Kg-dry	1	28-Jan-2020 22:26
Acetone	ND		0.018	mg/Kg-dry	1	28-Jan-2020 22:26
Benzene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Bromodichloromethane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Bromoform	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Bromomethane	ND		0.0088	mg/Kg-dry	1	28-Jan-2020 22:26
Carbon disulfide	ND		0.0088	mg/Kg-dry	1	28-Jan-2020 22:26
Carbon tetrachloride	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Chlorobenzene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Chloroethane	ND		0.0088	mg/Kg-dry	1	28-Jan-2020 22:26
Chloroform	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Chloromethane	ND		0.0088	mg/Kg-dry	1	28-Jan-2020 22:26
cis-1,2-Dichloroethene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
cis-1,3-Dichloropropene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Cyclohexane	ND	n	0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Dibromochloromethane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Dichlorodifluoromethane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Ethylbenzene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Isopropylbenzene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
m,p-Xylene	ND		0.0088	mg/Kg-dry	1	28-Jan-2020 22:26
Methyl acetate	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Methyl tert-butyl ether	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Methylcyclohexane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: SB-1 4-6
 Collection Date: 24-Jan-2020 09:20

ANALYTICAL REPORT

WorkOrder:HS20011129
 Lab ID:HS20011129-01
 Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260		Analyst: WLR		
Methylene chloride	ND		0.0088	mg/Kg-dry	1	28-Jan-2020 22:26
o-Xylene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Styrene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Tetrachloroethene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Toluene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
trans-1,2-Dichloroethene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
trans-1,3-Dichloropropene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Trichloroethene	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Trichlorofluoromethane	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Vinyl chloride	ND		0.0018	mg/Kg-dry	1	28-Jan-2020 22:26
Xylenes, Total	ND		0.0044	mg/Kg-dry	1	28-Jan-2020 22:26
Surr: 1,2-Dichloroethane-d4	92.3		70-126	%REC	1	28-Jan-2020 22:26
Surr: 4-Bromofluorobenzene	97.8		70-130	%REC	1	28-Jan-2020 22:26
Surr: Dibromofluoromethane	94.0		70-130	%REC	1	28-Jan-2020 22:26
Surr: Toluene-d8	101		70-130	%REC	1	28-Jan-2020 22:26
TEXAS TPH BY TX1005		Method:TX1005		Prep:TX1005PR / 27-Jan-2020 Analyst: MBG		
nC6 to nC12	ND		44	mg/Kg-dry	1	28-Jan-2020 09:16
>nC12 to nC28	ND		44	mg/Kg-dry	1	28-Jan-2020 09:16
>nC28 to nC35	ND		44	mg/Kg-dry	1	28-Jan-2020 09:16
Total Petroleum Hydrocarbon	ND		44	mg/Kg-dry	1	28-Jan-2020 09:16
Surr: 2-Fluorobiphenyl	74.5		70-130	%REC	1	28-Jan-2020 09:16
Surr: Trifluoromethyl benzene	81.6		70-130	%REC	1	28-Jan-2020 09:16
MOISTURE		Method:SW3550		Analyst: DFF		
Percent Moisture	15.7		0.0100	wt%	1	29-Jan-2020 10:29

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: SB-2 4-8
 Collection Date: 24-Jan-2020 11:10

ANALYTICAL REPORT

WorkOrder:HS20011129
 Lab ID:HS20011129-02
 Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260		Analyst: WLR		
1,1,1-Trichloroethane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,1,2,2-Tetrachloroethane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,1,2-Trichloroethane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,1-Dichloroethane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,1-Dichloroethene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,2,4-Trichlorobenzene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,2-Dibromo-3-chloropropane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,2-Dibromoethane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,2-Dichlorobenzene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,2-Dichloroethane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,2-Dichloropropane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,3-Dichlorobenzene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
1,4-Dichlorobenzene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
2-Butanone	ND		0.0083	mg/Kg-dry	1	28-Jan-2020 22:51
2-Hexanone	ND		0.0083	mg/Kg-dry	1	28-Jan-2020 22:51
4-Methyl-2-pentanone	ND		0.0083	mg/Kg-dry	1	28-Jan-2020 22:51
Acetone	ND		0.017	mg/Kg-dry	1	28-Jan-2020 22:51
Benzene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Bromodichloromethane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Bromoform	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Bromomethane	ND		0.0083	mg/Kg-dry	1	28-Jan-2020 22:51
Carbon disulfide	ND		0.0083	mg/Kg-dry	1	28-Jan-2020 22:51
Carbon tetrachloride	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Chlorobenzene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Chloroethane	ND		0.0083	mg/Kg-dry	1	28-Jan-2020 22:51
Chloroform	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Chloromethane	ND		0.0083	mg/Kg-dry	1	28-Jan-2020 22:51
cis-1,2-Dichloroethene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
cis-1,3-Dichloropropene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Cyclohexane	ND	n	0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Dibromochloromethane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Dichlorodifluoromethane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Ethylbenzene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Isopropylbenzene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
m,p-Xylene	ND		0.0083	mg/Kg-dry	1	28-Jan-2020 22:51
Methyl acetate	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Methyl tert-butyl ether	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Methylcyclohexane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: SB-2 4-8
 Collection Date: 24-Jan-2020 11:10

ANALYTICAL REPORT

WorkOrder:HS20011129
 Lab ID:HS20011129-02
 Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260		Analyst: WLR		
Methylene chloride	ND		0.0083	mg/Kg-dry	1	28-Jan-2020 22:51
o-Xylene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Styrene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Tetrachloroethene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Toluene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
trans-1,2-Dichloroethene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
trans-1,3-Dichloropropene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Trichloroethene	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Trichlorofluoromethane	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Vinyl chloride	ND		0.0017	mg/Kg-dry	1	28-Jan-2020 22:51
Xylenes, Total	ND		0.0041	mg/Kg-dry	1	28-Jan-2020 22:51
Surr: 1,2-Dichloroethane-d4	92.4		70-126	%REC	1	28-Jan-2020 22:51
Surr: 4-Bromofluorobenzene	96.8		70-130	%REC	1	28-Jan-2020 22:51
Surr: Dibromofluoromethane	93.9		70-130	%REC	1	28-Jan-2020 22:51
Surr: Toluene-d8	101		70-130	%REC	1	28-Jan-2020 22:51
TEXAS TPH BY TX1005		Method:TX1005		Prep:TX1005PR / 27-Jan-2020 Analyst: MBG		
nC6 to nC12	ND		46	mg/Kg-dry	1	28-Jan-2020 09:45
>nC12 to nC28	ND		46	mg/Kg-dry	1	28-Jan-2020 09:45
>nC28 to nC35	ND		46	mg/Kg-dry	1	28-Jan-2020 09:45
Total Petroleum Hydrocarbon	ND		46	mg/Kg-dry	1	28-Jan-2020 09:45
Surr: 2-Fluorobiphenyl	89.1		70-130	%REC	1	28-Jan-2020 09:45
Surr: Trifluoromethyl benzene	80.8		70-130	%REC	1	28-Jan-2020 09:45
MOISTURE		Method:SW3550		Analyst: DFF		
Percent Moisture	15.2		0.0100	wt%	1	29-Jan-2020 10:29

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: SB-3 4-8
 Collection Date: 24-Jan-2020 13:50

ANALYTICAL REPORT

WorkOrder:HS20011129
 Lab ID:HS20011129-03
 Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260		Analyst: WLR		
1,1,1-Trichloroethane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,1,2,2-Tetrachloroethane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,1,2-Trichlor-1,2,2-trifluoroethane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,1,2-Trichloroethane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,1-Dichloroethane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,1-Dichloroethene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,2,4-Trichlorobenzene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,2-Dibromo-3-chloropropane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,2-Dibromoethane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,2-Dichlorobenzene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,2-Dichloroethane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,2-Dichloropropane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,3-Dichlorobenzene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
1,4-Dichlorobenzene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
2-Butanone	ND		0.0091	mg/Kg-dry	1	28-Jan-2020 23:16
2-Hexanone	ND		0.0091	mg/Kg-dry	1	28-Jan-2020 23:16
4-Methyl-2-pentanone	ND		0.0091	mg/Kg-dry	1	28-Jan-2020 23:16
Acetone	ND		0.018	mg/Kg-dry	1	28-Jan-2020 23:16
Benzene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Bromodichloromethane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Bromoform	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Bromomethane	ND		0.0091	mg/Kg-dry	1	28-Jan-2020 23:16
Carbon disulfide	ND		0.0091	mg/Kg-dry	1	28-Jan-2020 23:16
Carbon tetrachloride	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Chlorobenzene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Chloroethane	ND		0.0091	mg/Kg-dry	1	28-Jan-2020 23:16
Chloroform	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Chloromethane	ND		0.0091	mg/Kg-dry	1	28-Jan-2020 23:16
cis-1,2-Dichloroethene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
cis-1,3-Dichloropropene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Cyclohexane	ND	n	0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Dibromochloromethane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Dichlorodifluoromethane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Ethylbenzene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Isopropylbenzene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
m,p-Xylene	ND		0.0091	mg/Kg-dry	1	28-Jan-2020 23:16
Methyl acetate	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Methyl tert-butyl ether	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Methylcyclohexane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: SB-3 4-8
 Collection Date: 24-Jan-2020 13:50

ANALYTICAL REPORT

WorkOrder:HS20011129
 Lab ID:HS20011129-03
 Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260		Analyst: WLR		
Methylene chloride	ND		0.0091	mg/Kg-dry	1	28-Jan-2020 23:16
o-Xylene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Styrene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Tetrachloroethene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Toluene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
trans-1,2-Dichloroethene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
trans-1,3-Dichloropropene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Trichloroethene	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Trichlorofluoromethane	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Vinyl chloride	ND		0.0018	mg/Kg-dry	1	28-Jan-2020 23:16
Xylenes, Total	ND		0.0045	mg/Kg-dry	1	28-Jan-2020 23:16
Surr: 1,2-Dichloroethane-d4	92.0		70-126	%REC	1	28-Jan-2020 23:16
Surr: 4-Bromofluorobenzene	95.2		70-130	%REC	1	28-Jan-2020 23:16
Surr: Dibromofluoromethane	91.2		70-130	%REC	1	28-Jan-2020 23:16
Surr: Toluene-d8	99.4		70-130	%REC	1	28-Jan-2020 23:16
TEXAS TPH BY TX1005		Method:TX1005		Prep:TX1005PR / 27-Jan-2020 Analyst: MBG		
nC6 to nC12	ND		44	mg/Kg-dry	1	28-Jan-2020 10:14
>nC12 to nC28	ND		44	mg/Kg-dry	1	28-Jan-2020 10:14
>nC28 to nC35	ND		44	mg/Kg-dry	1	28-Jan-2020 10:14
Total Petroleum Hydrocarbon	ND		44	mg/Kg-dry	1	28-Jan-2020 10:14
Surr: 2-Fluorobiphenyl	93.7		70-130	%REC	1	28-Jan-2020 10:14
Surr: Trifluoromethyl benzene	104		70-130	%REC	1	28-Jan-2020 10:14
MOISTURE		Method:SW3550		Analyst: DFF		
Percent Moisture	15.0		0.0100	wt%	1	29-Jan-2020 10:29

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: TMW-1
 Collection Date: 24-Jan-2020 12:05

ANALYTICAL REPORT

WorkOrder: HS20011129
 Lab ID: HS20011129-04
 Matrix: Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method: SW8260		Analyst: AKP		
1,1,1-Trichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,1,2,2-Tetrachloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,1,2-Trichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,1-Dichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,1-Dichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,2,4-Trichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,2-Dibromo-3-chloropropane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,2-Dibromoethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,2-Dichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,2-Dichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,2-Dichloropropane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,3-Dichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
1,4-Dichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
2-Butanone	ND		0.0020	mg/L	1	28-Jan-2020 03:21
2-Hexanone	ND		0.0020	mg/L	1	28-Jan-2020 03:21
4-Methyl-2-pentanone	ND		0.0020	mg/L	1	28-Jan-2020 03:21
Acetone	0.0082		0.0020	mg/L	1	28-Jan-2020 03:21
Benzene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Bromodichloromethane	0.0017		0.0010	mg/L	1	28-Jan-2020 03:21
Bromoform	0.0030		0.0010	mg/L	1	28-Jan-2020 03:21
Bromomethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Carbon disulfide	ND		0.0020	mg/L	1	28-Jan-2020 03:21
Carbon tetrachloride	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Chlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Chloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Chloroform	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Chloromethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
cis-1,2-Dichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
cis-1,3-Dichloropropene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Cyclohexane	ND	n	0.0010	mg/L	1	28-Jan-2020 03:21
Dibromochloromethane	0.0033		0.0010	mg/L	1	28-Jan-2020 03:21
Dichlorodifluoromethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Ethylbenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Isopropylbenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
m,p-Xylene	ND		0.0020	mg/L	1	28-Jan-2020 03:21
Methyl acetate	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Methyl tert-butyl ether	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Methylcyclohexane	ND		0.0010	mg/L	1	28-Jan-2020 03:21

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: TMW-1
 Collection Date: 24-Jan-2020 12:05

ANALYTICAL REPORT

WorkOrder:HS20011129
 Lab ID:HS20011129-04
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: AKP		
Methylene chloride	ND		0.0020	mg/L	1	28-Jan-2020 03:21
o-Xylene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Styrene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Tetrachloroethene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Toluene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
trans-1,2-Dichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
trans-1,3-Dichloropropene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Trichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Trichlorofluoromethane	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Vinyl chloride	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Xylenes, Total	ND		0.0010	mg/L	1	28-Jan-2020 03:21
Surr: 1,2-Dichloroethane-d4	106		70-126	%REC	1	28-Jan-2020 03:21
Surr: 4-Bromofluorobenzene	98.9		81-113	%REC	1	28-Jan-2020 03:21
Surr: Dibromofluoromethane	102		77-123	%REC	1	28-Jan-2020 03:21
Surr: Toluene-d8	100		82-127	%REC	1	28-Jan-2020 03:21
LOW-LEVEL TEXAS TPH BY TX1005		Method:TX1005		Prep:TX1005PR / 27-Jan-2020 Analyst: MBG		
nC6 to nC12	ND		0.48	mg/L	1	28-Jan-2020 11:12
>nC12 to nC28	ND		0.48	mg/L	1	28-Jan-2020 11:12
>nC28 to nC35	ND		0.48	mg/L	1	28-Jan-2020 11:12
Total Petroleum Hydrocarbon	ND		0.48	mg/L	1	28-Jan-2020 11:12
Surr: 2-Fluorobiphenyl	106		70-130	%REC	1	28-Jan-2020 11:12
Surr: Trifluoromethyl benzene	116		70-130	%REC	1	28-Jan-2020 11:12

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: TMW-2
 Collection Date: 24-Jan-2020 12:00

ANALYTICAL REPORT

WorkOrder: HS20011129
 Lab ID: HS20011129-05
 Matrix: Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method: SW8260		Analyst: AKP		
1,1,1-Trichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,1,2,2-Tetrachloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,1,2-Trichlor-1,2,2-trifluoroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,1,2-Trichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,1-Dichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,1-Dichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,2,4-Trichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,2-Dibromo-3-chloropropane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,2-Dibromoethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,2-Dichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,2-Dichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,2-Dichloropropane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,3-Dichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
1,4-Dichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
2-Butanone	ND		0.0020	mg/L	1	28-Jan-2020 03:46
2-Hexanone	ND		0.0020	mg/L	1	28-Jan-2020 03:46
4-Methyl-2-pentanone	ND		0.0020	mg/L	1	28-Jan-2020 03:46
Acetone	ND		0.0020	mg/L	1	28-Jan-2020 03:46
Benzene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Bromodichloromethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Bromoform	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Bromomethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Carbon disulfide	ND		0.0020	mg/L	1	28-Jan-2020 03:46
Carbon tetrachloride	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Chlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Chloroethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Chloroform	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Chloromethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
cis-1,2-Dichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
cis-1,3-Dichloropropene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Cyclohexane	ND	n	0.0010	mg/L	1	28-Jan-2020 03:46
Dibromochloromethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Dichlorodifluoromethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Ethylbenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Isopropylbenzene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
m,p-Xylene	ND		0.0020	mg/L	1	28-Jan-2020 03:46
Methyl acetate	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Methyl tert-butyl ether	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Methylcyclohexane	ND		0.0010	mg/L	1	28-Jan-2020 03:46

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: TMW-2
 Collection Date: 24-Jan-2020 12:00

ANALYTICAL REPORT

WorkOrder:HS20011129
 Lab ID:HS20011129-05
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260				Analyst: AKP
Methylene chloride	ND		0.0020	mg/L	1	28-Jan-2020 03:46
o-Xylene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Styrene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Tetrachloroethene	0.0012		0.0010	mg/L	1	28-Jan-2020 03:46
Toluene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
trans-1,2-Dichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
trans-1,3-Dichloropropene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Trichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Trichlorofluoromethane	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Vinyl chloride	ND		0.0010	mg/L	1	28-Jan-2020 03:46
Xylenes, Total	ND		0.0010	mg/L	1	28-Jan-2020 03:46
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>106</i>		<i>70-126</i>	<i>%REC</i>	<i>1</i>	<i>28-Jan-2020 03:46</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>101</i>		<i>81-113</i>	<i>%REC</i>	<i>1</i>	<i>28-Jan-2020 03:46</i>
<i>Surr: Dibromofluoromethane</i>	<i>101</i>		<i>77-123</i>	<i>%REC</i>	<i>1</i>	<i>28-Jan-2020 03:46</i>
<i>Surr: Toluene-d8</i>	<i>98.0</i>		<i>82-127</i>	<i>%REC</i>	<i>1</i>	<i>28-Jan-2020 03:46</i>
LOW-LEVEL TEXAS TPH BY TX1005		Method:TX1005		Prep:TX1005PR / 27-Jan-2020		Analyst: MBG
nC6 to nC12	ND		0.48	mg/L	1	28-Jan-2020 11:40
>nC12 to nC28	ND		0.48	mg/L	1	28-Jan-2020 11:40
>nC28 to nC35	ND		0.48	mg/L	1	28-Jan-2020 11:40
Total Petroleum Hydrocarbon	ND		0.48	mg/L	1	28-Jan-2020 11:40
<i>Surr: 2-Fluorobiphenyl</i>	<i>103</i>		<i>70-130</i>	<i>%REC</i>	<i>1</i>	<i>28-Jan-2020 11:40</i>
<i>Surr: Trifluoromethyl benzene</i>	<i>111</i>		<i>70-130</i>	<i>%REC</i>	<i>1</i>	<i>28-Jan-2020 11:40</i>

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: TMW-3
 Collection Date: 24-Jan-2020 13:25

ANALYTICAL REPORT

WorkOrder:HS20011129
 Lab ID:HS20011129-06
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: AKP		
1,1,1-Trichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,1,2,2-Tetrachloroethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,1,2-Trichlor-1,2,2-trifluoroethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,1,2-Trichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,1-Dichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,1-Dichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,2,4-Trichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,2-Dibromo-3-chloropropane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,2-Dibromoethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,2-Dichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,2-Dichloroethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,2-Dichloropropane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,3-Dichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
1,4-Dichlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
2-Butanone	ND		0.0020	mg/L	1	28-Jan-2020 04:10
2-Hexanone	ND		0.0020	mg/L	1	28-Jan-2020 04:10
4-Methyl-2-pentanone	ND		0.0020	mg/L	1	28-Jan-2020 04:10
Acetone	ND		0.0020	mg/L	1	28-Jan-2020 04:10
Benzene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Bromodichloromethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Bromoform	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Bromomethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Carbon disulfide	ND		0.0020	mg/L	1	28-Jan-2020 04:10
Carbon tetrachloride	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Chlorobenzene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Chloroethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Chloroform	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Chloromethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
cis-1,2-Dichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
cis-1,3-Dichloropropene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Cyclohexane	ND	n	0.0010	mg/L	1	28-Jan-2020 04:10
Dibromochloromethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Dichlorodifluoromethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Ethylbenzene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Isopropylbenzene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
m,p-Xylene	ND		0.0020	mg/L	1	28-Jan-2020 04:10
Methyl acetate	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Methyl tert-butyl ether	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Methylcyclohexane	ND		0.0010	mg/L	1	28-Jan-2020 04:10

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

Client: Phase Engineering, Inc.
 Project: 100 East Little York Road
 Sample ID: TMW-3
 Collection Date: 24-Jan-2020 13:25

ANALYTICAL REPORT

WorkOrder:HS20011129
 Lab ID:HS20011129-06
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260				Analyst: AKP
Methylene chloride	ND		0.0020	mg/L	1	28-Jan-2020 04:10
o-Xylene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Styrene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Tetrachloroethene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Toluene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
trans-1,2-Dichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
trans-1,3-Dichloropropene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Trichloroethene	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Trichlorofluoromethane	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Vinyl chloride	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Xylenes, Total	ND		0.0010	mg/L	1	28-Jan-2020 04:10
Surr: 1,2-Dichloroethane-d4	106		70-126	%REC	1	28-Jan-2020 04:10
Surr: 4-Bromofluorobenzene	101		81-113	%REC	1	28-Jan-2020 04:10
Surr: Dibromofluoromethane	102		77-123	%REC	1	28-Jan-2020 04:10
Surr: Toluene-d8	97.6		82-127	%REC	1	28-Jan-2020 04:10
LOW-LEVEL TEXAS TPH BY TX1005		Method:TX1005		Prep:TX1005PR / 27-Jan-2020		Analyst: MBG
nC6 to nC12	ND		0.48	mg/L	1	28-Jan-2020 12:09
>nC12 to nC28	ND		0.48	mg/L	1	28-Jan-2020 12:09
>nC28 to nC35	ND		0.48	mg/L	1	28-Jan-2020 12:09
Total Petroleum Hydrocarbon	ND		0.48	mg/L	1	28-Jan-2020 12:09
Surr: 2-Fluorobiphenyl	102		70-130	%REC	1	28-Jan-2020 12:09
Surr: Trifluoromethyl benzene	119		70-130	%REC	1	28-Jan-2020 12:09

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

Weight / Prep Log

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

Batch ID: 3579 **Start Date:** 27 Jan 2020 11:23 **End Date:** 27 Jan 2020 11:23
Method: VOLATILES BY SW8260C

Sample ID	Container	Sample Wt/Vol	Final Volume	Weight Factor	Container Type
HS20011129-01	1	6.747 (g)	5 (mL)	0.74	TerraCore (5035A)
HS20011129-02	1	7.103 (g)	5 (mL)	0.7	TerraCore (5035A)
HS20011129-03	1	6.47 (g)	5 (mL)	0.77	TerraCore (5035A)

Batch ID: 150001 **Start Date:** 27 Jan 2020 11:30 **End Date:** 27 Jan 2020 15:00
Method: TX 1005 PREP **Prep Code:** TX 1005_W PR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS20011129-04	1	31.39 (g)	3 (mL)	0.09557
HS20011129-05	1	31.02 (g)	3 (mL)	0.09671
HS20011129-06	1	31.36 (g)	3 (mL)	0.09566

Batch ID: 150002 **Start Date:** 27 Jan 2020 12:00 **End Date:** 27 Jan 2020 15:30
Method: TX 1005 PREP **Prep Code:** TX 1005_S PR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS20011129-01	1	13.4 (g)	10 (mL)	0.7463
HS20011129-02	1	12.82 (g)	10 (mL)	0.78
HS20011129-03	1	13.37 (g)	10 (mL)	0.7479

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 150001 (0)		Test Name : LOW-LEVEL TEXAS TPH BY TX1005			Matrix: Water	
HS20011129-04	TMW-1	24 Jan 2020 12:05		27 Jan 2020 11:30	28 Jan 2020 11:12	1
HS20011129-05	TMW-2	24 Jan 2020 12:00		27 Jan 2020 11:30	28 Jan 2020 11:40	1
HS20011129-06	TMW-3	24 Jan 2020 13:25		27 Jan 2020 11:30	28 Jan 2020 12:09	1
Batch ID: 150002 (0)		Test Name : TEXAS TPH BY TX1005			Matrix: Soil	
HS20011129-01	SB-1 4-6	24 Jan 2020 09:20		27 Jan 2020 12:00	28 Jan 2020 09:16	1
HS20011129-02	SB-2 4-8	24 Jan 2020 11:10		27 Jan 2020 12:00	28 Jan 2020 09:45	1
HS20011129-03	SB-3 4-8	24 Jan 2020 13:50		27 Jan 2020 12:00	28 Jan 2020 10:14	1
Batch ID: R355150 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Water	
HS20011129-04	TMW-1	24 Jan 2020 12:05			28 Jan 2020 03:21	1
HS20011129-05	TMW-2	24 Jan 2020 12:00			28 Jan 2020 03:46	1
HS20011129-06	TMW-3	24 Jan 2020 13:25			28 Jan 2020 04:10	1
Batch ID: R355233 (0)		Test Name : VOLATILES BY SW8260C			Matrix: Soil	
HS20011129-01	SB-1 4-6	24 Jan 2020 09:20			28 Jan 2020 22:26	1
HS20011129-02	SB-2 4-8	24 Jan 2020 11:10			28 Jan 2020 22:51	1
HS20011129-03	SB-3 4-8	24 Jan 2020 13:50			28 Jan 2020 23:16	1
Batch ID: R355350 (0)		Test Name : MOISTURE			Matrix: Soil	
HS20011129-01	SB-1 4-6	24 Jan 2020 09:20			29 Jan 2020 10:29	1
HS20011129-02	SB-2 4-8	24 Jan 2020 11:10			29 Jan 2020 10:29	1
HS20011129-03	SB-3 4-8	24 Jan 2020 13:50			29 Jan 2020 10:29	1

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: 150001 (0)		Instrument: FID-11		Method: LOW-LEVEL TEXAS TPH BY TX1005					
MBLK	Sample ID: MBLK-150001	Units: mg/L		Analysis Date: 28-Jan-2020 00:38					
Client ID:	Run ID: FID-11_355126	SeqNo: 5449096		PrepDate: 27-Jan-2020		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
nC6 to nC12	ND	0.50							
>nC12 to nC28	ND	0.50							
>nC28 to nC35	ND	0.50							
Total Petroleum Hydrocarbon	ND	0.50							
Surr: 2-Fluorobiphenyl	2.522	0	2.5	0	101	70 - 130			
Surr: Trifluoromethyl benzene	2.836	0	2.5	0	113	70 - 130			
LCS	Sample ID: LCS-150001	Units: mg/L		Analysis Date: 28-Jan-2020 01:07					
Client ID:	Run ID: FID-11_355126	SeqNo: 5449097		PrepDate: 27-Jan-2020		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
nC6 to nC12	24.89	0.50	25	0	99.6	75 - 125			
>nC12 to nC28	19.89	0.50	25	0	79.6	75 - 125			
Surr: 2-Fluorobiphenyl	3.105	0	2.5	0	124	70 - 130			
Surr: Trifluoromethyl benzene	2.941	0	2.5	0	118	70 - 130			
LCSD	Sample ID: LCSD-150001	Units: mg/L		Analysis Date: 28-Jan-2020 01:36					
Client ID:	Run ID: FID-11_355126	SeqNo: 5449098		PrepDate: 27-Jan-2020		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
nC6 to nC12	27.7	0.50	25	0	111	75 - 125	24.89	10.7	20
>nC12 to nC28	26.89	0.50	25	0	108	75 - 125	19.89	29.9	20 R
Surr: 2-Fluorobiphenyl	2.962	0	2.5	0	118	70 - 130	3.105	4.71	20
Surr: Trifluoromethyl benzene	3.082	0	2.5	0	123	70 - 130	2.941	4.69	20
MS	Sample ID: HS20011125-01MS	Units: mg/L		Analysis Date: 28-Jan-2020 02:33					
Client ID:	Run ID: FID-11_355126	SeqNo: 5449100		PrepDate: 27-Jan-2020		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
nC6 to nC12	25.04	0.47	23.74	0	105	75 - 125			
>nC12 to nC28	22.7	0.47	23.74	0	95.6	75 - 125			
Surr: 2-Fluorobiphenyl	2.971	0	2.374	0	125	70 - 130			
Surr: Trifluoromethyl benzene	2.841	0	2.374	0	120	70 - 130			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
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QC BATCH REPORT

Batch ID: 150001 (0)		Instrument: FID-11		Method: LOW-LEVEL TEXAS TPH BY TX1005						
MSD		Sample ID: HS20011125-01MSD		Units: mg/L		Analysis Date: 28-Jan-2020 03:02				
Client ID:		Run ID: FID-11_355126		SeqNo: 5449101		PrepDate: 27-Jan-2020		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	25.06	0.48	24.03	0	104	75 - 125	25.04	0.0582	20	
>nC12 to nC28	22.66	0.48	24.03	0	94.3	75 - 125	22.7	0.181	20	
Surr: 2-Fluorobiphenyl	3.005	0	2.403	0	125	70 - 130	2.971	1.15	20	
Surr: Trifluoromethyl benzene	2.826	0	2.403	0	118	70 - 130	2.841	0.529	20	
The following samples were analyzed in this batch:										
HS20011129-04			HS20011129-05			HS20011129-06				

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
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QC BATCH REPORT

Batch ID: 150002 (0)		Instrument: FID-10		Method: TEXAS TPH BY TX1005					
MBLK	Sample ID: MBLK-150002	Units: mg/Kg		Analysis Date: 28-Jan-2020 01:07					
Client ID:	Run ID: FID-10_355252	SeqNo: 5451374		PrepDate: 27-Jan-2020		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
nC6 to nC12	ND	50							
>nC12 to nC28	ND	50							
>nC28 to nC35	ND	50							
Total Petroleum Hydrocarbon	ND	50							
Surr: 2-Fluorobiphenyl	23.95	0	25	0	95.8	70 - 130			
Surr: Trifluoromethyl benzene	23.29	0	25	0	93.2	70 - 130			
LCS	Sample ID: LCS-150002	Units: mg/Kg		Analysis Date: 28-Jan-2020 01:36					
Client ID:	Run ID: FID-10_355252	SeqNo: 5451375		PrepDate: 27-Jan-2020		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
nC6 to nC12	265.8	50	250	0	106	75 - 125			
>nC12 to nC28	197.7	50	250	0	79.1	75 - 125			
Surr: 2-Fluorobiphenyl	31.32	0	25	0	125	70 - 130			
Surr: Trifluoromethyl benzene	26.47	0	25	0	106	70 - 130			
LCSD	Sample ID: LCSD-150002	Units: mg/Kg		Analysis Date: 28-Jan-2020 02:05					
Client ID:	Run ID: FID-10_355252	SeqNo: 5451376		PrepDate: 27-Jan-2020		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
nC6 to nC12	241.1	50	250	0	96.4	75 - 125	265.8	9.76	20
>nC12 to nC28	208.4	50	250	0	83.4	75 - 125	197.7	5.29	20
Surr: 2-Fluorobiphenyl	29.21	0	25	0	117	70 - 130	31.32	6.97	20
Surr: Trifluoromethyl benzene	23.44	0	25	0	93.8	70 - 130	26.47	12.2	20
MS	Sample ID: HS20011081-01MS	Units: mg/Kg		Analysis Date: 28-Jan-2020 03:02					
Client ID:	Run ID: FID-10_355252	SeqNo: 5451378		PrepDate: 27-Jan-2020		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
nC6 to nC12	255.9	49	243.9	0	105	75 - 125			
>nC12 to nC28	200.8	49	243.9	76.18	51.1	75 - 125			S
Surr: 2-Fluorobiphenyl	31.19	0	24.39	0	128	70 - 130			
Surr: Trifluoromethyl benzene	25.01	0	24.39	0	103	70 - 130			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
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QC BATCH REPORT

Batch ID: 150002 (0)		Instrument: FID-10		Method: TEXAS TPH BY TX1005						
MSD		Sample ID: HS20011081-01MSD		Units: mg/Kg		Analysis Date: 28-Jan-2020 03:31				
Client ID:		Run ID: FID-10_355252		SeqNo: 5451379		PrepDate: 27-Jan-2020		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	220.8	49	245.3	0	90.0	75 - 125	255.9	14.7	20	
>nC12 to nC28	205.4	49	245.3	76.18	52.7	75 - 125	200.8	2.22	20	S
Surr: 2-Fluorobiphenyl	25.56	0	24.53	0	104	70 - 130	31.19	19.8	20	
Surr: Trifluoromethyl benzene	21.35	0	24.53	0	87.0	70 - 130	25.01	15.8	20	
The following samples were analyzed in this batch:										
HS20011129-01			HS20011129-02			HS20011129-03				

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355150 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C					
MBLK	Sample ID: VBLKW-200127	Units: mg/L		Analysis Date: 28-Jan-2020 00:04					
Client ID:	Run ID: VOA4_355150	SeqNo: 5449458		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1,1-Trichloroethane	ND	0.0010							
1,1,2,2-Tetrachloroethane	ND	0.0010							
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0010							
1,1,2-Trichloroethane	ND	0.0010							
1,1-Dichloroethane	ND	0.0010							
1,1-Dichloroethene	ND	0.0010							
1,2,4-Trichlorobenzene	ND	0.0010							
1,2-Dibromo-3-chloropropane	ND	0.0010							
1,2-Dibromoethane	ND	0.0010							
1,2-Dichlorobenzene	ND	0.0010							
1,2-Dichloroethane	ND	0.0010							
1,2-Dichloropropane	ND	0.0010							
1,3-Dichlorobenzene	ND	0.0010							
1,4-Dichlorobenzene	ND	0.0010							
2-Butanone	ND	0.0020							
2-Hexanone	ND	0.0020							
4-Methyl-2-pentanone	ND	0.0020							
Acetone	ND	0.0020							
Benzene	ND	0.0010							
Bromodichloromethane	ND	0.0010							
Bromoform	ND	0.0010							
Bromomethane	ND	0.0010							
Carbon disulfide	ND	0.0020							
Carbon tetrachloride	ND	0.0010							
Chlorobenzene	ND	0.0010							
Chloroethane	ND	0.0010							
Chloroform	ND	0.0010							
Chloromethane	ND	0.0010							
cis-1,2-Dichloroethene	ND	0.0010							
cis-1,3-Dichloropropene	ND	0.0010							
Cyclohexane	ND	0.0010							
Dibromochloromethane	ND	0.0010							
Dichlorodifluoromethane	ND	0.0010							
Ethylbenzene	ND	0.0010							

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
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QC BATCH REPORT

Batch ID: R355150 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C					
MBLK	Sample ID: VBLKW-200127	Units: mg/L		Analysis Date: 28-Jan-2020 00:04					
Client ID:	Run ID: VOA4_355150	SeqNo: 5449458		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Isopropylbenzene	ND	0.0010							
m,p-Xylene	ND	0.0020							
Methyl acetate	ND	0.0010							
Methyl tert-butyl ether	ND	0.0010							
Methylcyclohexane	ND	0.0010							
Methylene chloride	ND	0.0020							
o-Xylene	ND	0.0010							
Styrene	ND	0.0010							
Tetrachloroethene	ND	0.0010							
Toluene	ND	0.0010							
trans-1,2-Dichloroethene	ND	0.0010							
trans-1,3-Dichloropropene	ND	0.0010							
Trichloroethene	ND	0.0010							
Trichlorofluoromethane	ND	0.0010							
Vinyl chloride	ND	0.0010							
Xylenes, Total	ND	0.0010							
Surr: 1,2-Dichloroethane-d4	0.054	0.0010	0.05	0	107	70 - 123			
Surr: 4-Bromofluorobenzene	0.050	0.0010	0.05	0	99.6	82 - 115			
Surr: Dibromofluoromethane	0.051	0.0010	0.05	0	103	73 - 126			
Surr: Toluene-d8	0.051	0.0010	0.05	0	103	81 - 120			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
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QC BATCH REPORT

Batch ID: R355150 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C					
LCS		Sample ID: VLCSW-200127		Units: mg/L		Analysis Date: 27-Jan-2020 23:14			
Client ID:		Run ID: VOA4_355150		SeqNo: 5449457		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1,1-Trichloroethane	0.019	0.0010	0.02	0	94.8	70 - 130			
1,1,2,2-Tetrachloroethane	0.019	0.0010	0.02	0	93.6	70 - 120			
1,1,2-Trichlor-1,2,2-trifluoroethane	0.019	0.0010	0.02	0	94.1	70 - 130			
1,1,2-Trichloroethane	0.019	0.0010	0.02	0	92.7	77 - 113			
1,1-Dichloroethane	0.019	0.0010	0.02	0	93.9	71 - 122			
1,1-Dichloroethene	0.018	0.0010	0.02	0	92.4	70 - 130			
1,2,4-Trichlorobenzene	0.020	0.0010	0.02	0	101	77 - 126			
1,2-Dibromo-3-chloropropane	0.020	0.0010	0.02	0	102	70 - 130			
1,2-Dibromoethane	0.019	0.0010	0.02	0	95.9	76 - 123			
1,2-Dichlorobenzene	0.019	0.0010	0.02	0	93.6	77 - 113			
1,2-Dichloroethane	0.018	0.0010	0.02	0	88.9	70 - 124			
1,2-Dichloropropane	0.018	0.0010	0.02	0	91.4	72 - 119			
1,3-Dichlorobenzene	0.019	0.0010	0.02	0	95.2	78 - 118			
1,4-Dichlorobenzene	0.018	0.0010	0.02	0	89.8	79 - 113			
2-Butanone	0.039	0.0020	0.04	0	97.0	70 - 130			
2-Hexanone	0.039	0.0020	0.04	0	96.7	70 - 130			
4-Methyl-2-pentanone	0.041	0.0020	0.04	0	102	70 - 130			
Acetone	0.038	0.0020	0.04	0	96.2	70 - 130			
Benzene	0.019	0.0010	0.02	0	94.1	74 - 120			
Bromodichloromethane	0.019	0.0010	0.02	0	94.4	74 - 122			
Bromoform	0.020	0.0010	0.02	0	98.4	73 - 128			
Bromomethane	0.019	0.0010	0.02	0	94.3	70 - 130			
Carbon disulfide	0.036	0.0020	0.04	0	90.8	70 - 130			
Carbon tetrachloride	0.018	0.0010	0.02	0	89.3	71 - 125			
Chlorobenzene	0.019	0.0010	0.02	0	93.4	76 - 113			
Chloroethane	0.019	0.0010	0.02	0	97.1	70 - 130			
Chloroform	0.019	0.0010	0.02	0	95.3	71 - 121			
Chloromethane	0.020	0.0010	0.02	0	98.4	70 - 129			
cis-1,2-Dichloroethene	0.019	0.0010	0.02	0	95.3	75 - 122			
cis-1,3-Dichloropropene	0.019	0.0010	0.02	0	97.5	73 - 127			
Cyclohexane	0.019	0.0010	0.02	0	95.4	70 - 130			
Dibromochloromethane	0.020	0.0010	0.02	0	97.7	77 - 122			
Dichlorodifluoromethane	0.017	0.0010	0.02	0	83.0	70 - 130			
Ethylbenzene	0.018	0.0010	0.02	0	92.3	77 - 117			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
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QC BATCH REPORT

Batch ID: R355150 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C					
LCS		Sample ID: VLCSW-200127		Units: mg/L		Analysis Date: 27-Jan-2020 23:14			
Client ID:		Run ID: VOA4_355150		SeqNo: 5449457		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Isopropylbenzene	0.020	0.0010	0.02	0	98.4	73 - 127			
m,p-Xylene	0.038	0.0020	0.04	0	95.3	77 - 122			
Methyl acetate	0.020	0.0010	0.02	0	101	76 - 122			
Methyl tert-butyl ether	0.019	0.0010	0.02	0	93.4	70 - 130			
Methylcyclohexane	0.018	0.0010	0.02	0	90.0	61 - 157			
Methylene chloride	0.020	0.0020	0.02	0	100.0	70 - 127			
o-Xylene	0.019	0.0010	0.02	0	95.0	75 - 119			
Styrene	0.021	0.0010	0.02	0	105	72 - 126			
Tetrachloroethene	0.018	0.0010	0.02	0	89.4	76 - 119			
Toluene	0.019	0.0010	0.02	0	93.0	77 - 118			
trans-1,2-Dichloroethene	0.018	0.0010	0.02	0	89.4	72 - 127			
trans-1,3-Dichloropropene	0.018	0.0010	0.02	0	92.4	77 - 119			
Trichloroethene	0.018	0.0010	0.02	0	91.7	77 - 121			
Trichlorofluoromethane	0.017	0.0010	0.02	0	86.7	70 - 130			
Vinyl chloride	0.018	0.0010	0.02	0	88.0	70 - 130			
Xylenes, Total	0.057	0.0010	0.06	0	95.2	75 - 122			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>0.051</i>	<i>0.0010</i>	<i>0.05</i>	<i>0</i>	<i>102</i>	<i>70 - 130</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>0.051</i>	<i>0.0010</i>	<i>0.05</i>	<i>0</i>	<i>102</i>	<i>82 - 115</i>			
<i>Surr: Dibromofluoromethane</i>	<i>0.051</i>	<i>0.0010</i>	<i>0.05</i>	<i>0</i>	<i>103</i>	<i>73 - 126</i>			
<i>Surr: Toluene-d8</i>	<i>0.049</i>	<i>0.0010</i>	<i>0.05</i>	<i>0</i>	<i>98.7</i>	<i>81 - 120</i>			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
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QC BATCH REPORT

Batch ID: R355150 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C					
MS		Sample ID: HS20010958-02MS		Units: mg/L		Analysis Date: 28-Jan-2020 02:07			
Client ID:		Run ID: VOA4_355150		SeqNo: 5449463		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1,1-Trichloroethane	0.020	0.0010	0.02	0	100	70 - 130			
1,1,2,2-Tetrachloroethane	0.018	0.0010	0.02	0	91.4	70 - 123			
1,1,2-Trichlor-1,2,2-trifluoroethane	0.018	0.0010	0.02	0	88.1	70 - 130			
1,1,2-Trichloroethane	0.019	0.0010	0.02	0	93.3	70 - 117			
1,1-Dichloroethane	0.019	0.0010	0.02	0	93.1	70 - 127			
1,1-Dichloroethene	0.019	0.0010	0.02	0	95.0	70 - 130			
1,2,4-Trichlorobenzene	0.018	0.0010	0.02	0	89.9	70 - 125			
1,2-Dibromo-3-chloropropane	0.018	0.0010	0.02	0	91.8	70 - 130			
1,2-Dibromoethane	0.018	0.0010	0.02	0	92.3	70 - 124			
1,2-Dichlorobenzene	0.018	0.0010	0.02	0	87.8	70 - 115			
1,2-Dichloroethane	0.017	0.0010	0.02	0	84.5	70 - 127			
1,2-Dichloropropane	0.017	0.0010	0.02	0	85.1	70 - 122			
1,3-Dichlorobenzene	0.018	0.0010	0.02	0	88.0	70 - 119			
1,4-Dichlorobenzene	0.017	0.0010	0.02	0	83.6	70 - 114			
2-Butanone	0.024	0.0020	0.04	0	60.7	70 - 130			S
2-Hexanone	0.025	0.0020	0.04	0	62.0	70 - 130			S
4-Methyl-2-pentanone	0.027	0.0020	0.04	0	67.0	70 - 130			S
Acetone	0.027	0.0020	0.04	0	67.7	70 - 130			S
Benzene	0.019	0.0010	0.02	0	94.1	70 - 127			
Bromodichloromethane	0.018	0.0010	0.02	0	91.1	70 - 124			
Bromoform	0.018	0.0010	0.02	0	89.7	70 - 129			
Bromomethane	0.019	0.0010	0.02	0	93.4	70 - 130			
Carbon disulfide	0.036	0.0020	0.04	0	89.1	70 - 130			
Carbon tetrachloride	0.019	0.0010	0.02	0	92.7	70 - 130			
Chlorobenzene	0.018	0.0010	0.02	0	89.4	70 - 114			
Chloroethane	0.018	0.0010	0.02	0	90.6	70 - 130			
Chloroform	0.019	0.0010	0.02	0	93.1	70 - 125			
Chloromethane	0.018	0.0010	0.02	0	89.0	70 - 130			
cis-1,2-Dichloroethene	0.018	0.0010	0.02	0	91.3	70 - 128			
cis-1,3-Dichloropropene	0.018	0.0010	0.02	0	89.7	70 - 125			
Cyclohexane	0.021	0.0010	0.02	0	104	70 - 130			
Dibromochloromethane	0.019	0.0010	0.02	0	94.4	70 - 124			
Dichlorodifluoromethane	0.017	0.0010	0.02	0	83.9	70 - 130			
Ethylbenzene	0.018	0.0010	0.02	0	89.9	70 - 124			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355150 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C					
MS		Sample ID: HS20010958-02MS		Units: mg/L		Analysis Date: 28-Jan-2020 02:07			
Client ID:		Run ID: VOA4_355150		SeqNo: 5449463		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Isopropylbenzene	0.019	0.0010	0.02	0	97.2	70 - 130			
m,p-Xylene	0.037	0.0020	0.04	0	92.9	70 - 130			
Methyl acetate	0.016	0.0010	0.02	0	82.3	76 - 122			
Methyl tert-butyl ether	0.019	0.0010	0.02	0	94.0	70 - 130			
Methylcyclohexane	0.020	0.0010	0.02	0	99.9	61 - 158			
Methylene chloride	0.019	0.0020	0.02	0	94.6	70 - 128			
o-Xylene	0.017	0.0010	0.02	0	87.0	70 - 124			
Styrene	0.019	0.0010	0.02	0	96.1	70 - 130			
Tetrachloroethene	0.018	0.0010	0.02	0	90.2	70 - 130			
Toluene	0.019	0.0010	0.02	0	93.8	70 - 123			
trans-1,2-Dichloroethene	0.019	0.0010	0.02	0	93.3	70 - 130			
trans-1,3-Dichloropropene	0.017	0.0010	0.02	0	85.1	70 - 121			
Trichloroethene	0.019	0.0010	0.02	0	93.6	70 - 129			
Trichlorofluoromethane	0.020	0.0010	0.02	0	98.7	70 - 130			
Vinyl chloride	0.018	0.0010	0.02	0	87.9	70 - 130			
Xylenes, Total	0.055	0.0010	0.06	0	90.9	70 - 130			
Surr: 1,2-Dichloroethane-d4	0.052	0.0010	0.05	0	103	70 - 126			
Surr: 4-Bromofluorobenzene	0.051	0.0010	0.05	0	102	81 - 113			
Surr: Dibromofluoromethane	0.051	0.0010	0.05	0	102	77 - 123			
Surr: Toluene-d8	0.051	0.0010	0.05	0	101	82 - 127			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355150 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C					
MSD		Sample ID: HS20010958-02MSD		Units: mg/L		Analysis Date: 28-Jan-2020 02:32			
Client ID:		Run ID: VOA4_355150		SeqNo: 5449464		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
1,1,1-Trichloroethane	0.019	0.0010	0.02	0	97.3	70 - 130	0.02008	3.2	20
1,1,2,2-Tetrachloroethane	0.018	0.0010	0.02	0	92.2	70 - 123	0.01828	0.851	20
1,1,2-Trichlor-1,2,2-trifluoroethane	0.017	0.0010	0.02	0	84.8	70 - 130	0.01761	3.78	20
1,1,2-Trichloroethane	0.018	0.0010	0.02	0	91.1	70 - 117	0.01867	2.47	20
1,1-Dichloroethane	0.018	0.0010	0.02	0	90.0	70 - 127	0.01861	3.33	20
1,1-Dichloroethene	0.018	0.0010	0.02	0	92.0	70 - 130	0.01901	3.2	20
1,2,4-Trichlorobenzene	0.018	0.0010	0.02	0	90.8	70 - 125	0.01797	1.06	20
1,2-Dibromo-3-chloropropane	0.019	0.0010	0.02	0	95.7	70 - 130	0.01837	4.11	20
1,2-Dibromoethane	0.018	0.0010	0.02	0	91.3	70 - 124	0.01847	1.15	20
1,2-Dichlorobenzene	0.017	0.0010	0.02	0	86.1	70 - 115	0.01757	2.05	20
1,2-Dichloroethane	0.016	0.0010	0.02	0	81.4	70 - 127	0.01691	3.76	20
1,2-Dichloropropane	0.016	0.0010	0.02	0	82.2	70 - 122	0.01701	3.48	20
1,3-Dichlorobenzene	0.018	0.0010	0.02	0	88.8	70 - 119	0.01759	0.912	20
1,4-Dichlorobenzene	0.016	0.0010	0.02	0	82.2	70 - 114	0.01671	1.69	20
2-Butanone	0.026	0.0020	0.04	0	65.3	70 - 130	0.02430	7.26	20 S
2-Hexanone	0.025	0.0020	0.04	0	63.3	70 - 130	0.02479	2.18	20 S
4-Methyl-2-pentanone	0.028	0.0020	0.04	0	69.5	70 - 130	0.02681	3.67	20 S
Acetone	0.027	0.0020	0.04	0	67.5	70 - 130	0.02706	0.268	20 S
Benzene	0.018	0.0010	0.02	0	89.7	70 - 127	0.01882	4.77	20
Bromodichloromethane	0.018	0.0010	0.02	0	88.6	70 - 124	0.01822	2.74	20
Bromoform	0.018	0.0010	0.02	0	89.3	70 - 129	0.01794	0.513	20
Bromomethane	0.018	0.0010	0.02	0	87.5	70 - 130	0.01869	6.59	20
Carbon disulfide	0.033	0.0020	0.04	0	83.7	70 - 130	0.03565	6.31	20
Carbon tetrachloride	0.018	0.0010	0.02	0	89.8	70 - 130	0.01855	3.22	20
Chlorobenzene	0.018	0.0010	0.02	0	87.7	70 - 114	0.01788	1.94	20
Chloroethane	0.018	0.0010	0.02	0	88.4	70 - 130	0.01813	2.49	20
Chloroform	0.018	0.0010	0.02	0	90.3	70 - 125	0.01862	2.99	20
Chloromethane	0.017	0.0010	0.02	0	82.9	70 - 130	0.01780	7.14	20
cis-1,2-Dichloroethene	0.017	0.0010	0.02	0	86.6	70 - 128	0.01826	5.31	20
cis-1,3-Dichloropropene	0.017	0.0010	0.02	0	86.3	70 - 125	0.01794	3.88	20
Cyclohexane	0.020	0.0010	0.02	0	100	70 - 130	0.02087	4	20
Dibromochloromethane	0.018	0.0010	0.02	0	91.3	70 - 124	0.01888	3.39	20
Dichlorodifluoromethane	0.016	0.0010	0.02	0	81.7	70 - 130	0.01679	2.7	20
Ethylbenzene	0.018	0.0010	0.02	0	88.5	70 - 124	0.01799	1.57	20

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355150 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C					
MSD		Sample ID: HS20010958-02MSD		Units: mg/L		Analysis Date: 28-Jan-2020 02:32			
Client ID:		Run ID: VOA4_355150		SeqNo: 5449464		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Isopropylbenzene	0.019	0.0010	0.02	0	93.0	70 - 130	0.01945	4.41	20
m,p-Xylene	0.036	0.0020	0.04	0	89.3	70 - 130	0.03715	3.86	20
Methyl acetate	0.016	0.0010	0.02	0	81.7	76 - 122	0.01647	0.818	20
Methyl tert-butyl ether	0.019	0.0010	0.02	0	96.4	70 - 130	0.01881	2.42	20
Methylcyclohexane	0.019	0.0010	0.02	0	92.8	61 - 158	0.01999	7.35	20
Methylene chloride	0.019	0.0020	0.02	0	93.7	70 - 128	0.01893	0.98	20
o-Xylene	0.017	0.0010	0.02	0	87.4	70 - 124	0.01740	0.448	20
Styrene	0.019	0.0010	0.02	0	94.0	70 - 130	0.01921	2.15	20
Tetrachloroethene	0.018	0.0010	0.02	0	88.0	70 - 130	0.01805	2.47	20
Toluene	0.018	0.0010	0.02	0	88.6	70 - 123	0.01876	5.69	20
trans-1,2-Dichloroethene	0.017	0.0010	0.02	0	85.8	70 - 130	0.01865	8.38	20
trans-1,3-Dichloropropene	0.017	0.0010	0.02	0	82.6	70 - 121	0.01701	2.9	20
Trichloroethene	0.018	0.0010	0.02	0	88.2	70 - 129	0.01873	5.95	20
Trichlorofluoromethane	0.019	0.0010	0.02	0	94.8	70 - 130	0.01974	4.01	20
Vinyl chloride	0.017	0.0010	0.02	0	84.8	70 - 130	0.01758	3.57	20
Xylenes, Total	0.053	0.0010	0.06	0	88.7	70 - 130	0.05455	2.47	20
Surr: 1,2-Dichloroethane-d4	0.052	0.0010	0.05	0	103	70 - 126	0.05155	0.229	20
Surr: 4-Bromofluorobenzene	0.051	0.0010	0.05	0	102	81 - 113	0.05092	0.238	20
Surr: Dibromofluoromethane	0.051	0.0010	0.05	0	103	77 - 123	0.05117	0.604	20
Surr: Toluene-d8	0.050	0.0010	0.05	0	100	82 - 127	0.05057	0.637	20
The following samples were analyzed in this batch:									
HS20011129-04		HS20011129-05		HS20011129-06					

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355233 (0)		Instrument: VOA5		Method: VOLATILES BY SW8260C					
MBLK	Sample ID: VBLKS1-012820	Units: mg/Kg		Analysis Date: 28-Jan-2020 18:17					
Client ID:	Run ID: VOA5_355233	SeqNo: 5450815		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1,1-Trichloroethane	ND	0.0050							
1,1,2,2-Tetrachloroethane	ND	0.0050							
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0050							
1,1,2-Trichloroethane	ND	0.0050							
1,1-Dichloroethane	ND	0.0050							
1,1-Dichloroethene	ND	0.0050							
1,2,4-Trichlorobenzene	ND	0.0050							
1,2-Dibromo-3-chloropropane	ND	0.0050							
1,2-Dibromoethane	ND	0.0050							
1,2-Dichlorobenzene	ND	0.0050							
1,2-Dichloroethane	ND	0.0050							
1,2-Dichloropropane	ND	0.0050							
1,3-Dichlorobenzene	ND	0.0050							
1,4-Dichlorobenzene	ND	0.0050							
2-Butanone	ND	0.010							
2-Hexanone	ND	0.010							
4-Methyl-2-pentanone	ND	0.010							
Acetone	ND	0.020							
Benzene	ND	0.0050							
Bromodichloromethane	ND	0.0050							
Bromoform	ND	0.0050							
Bromomethane	ND	0.010							
Carbon disulfide	ND	0.010							
Carbon tetrachloride	ND	0.0050							
Chlorobenzene	ND	0.0050							
Chloroethane	ND	0.010							
Chloroform	ND	0.0050							
Chloromethane	ND	0.010							
cis-1,2-Dichloroethene	ND	0.0050							
cis-1,3-Dichloropropene	ND	0.0050							
Cyclohexane	ND	0.0050							
Dibromochloromethane	ND	0.0050							
Dichlorodifluoromethane	ND	0.0050							
Ethylbenzene	ND	0.0050							

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355233 (0)		Instrument: VOA5		Method: VOLATILES BY SW8260C					
MBLK	Sample ID: VBLKS1-012820	Units: mg/Kg		Analysis Date: 28-Jan-2020 18:17					
Client ID:	Run ID: VOA5_355233	SeqNo: 5450815		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Isopropylbenzene	ND	0.0050							
m,p-Xylene	ND	0.010							
Methyl acetate	ND	0.0050							
Methyl tert-butyl ether	ND	0.0050							
Methylcyclohexane	ND	0.0050							
Methylene chloride	ND	0.010							
o-Xylene	ND	0.0050							
Styrene	ND	0.0050							
Tetrachloroethene	ND	0.0050							
Toluene	ND	0.0050							
trans-1,2-Dichloroethene	ND	0.0050							
trans-1,3-Dichloropropene	ND	0.0050							
Trichloroethene	ND	0.0050							
Trichlorofluoromethane	ND	0.0050							
Vinyl chloride	ND	0.0020							
Xylenes, Total	ND	0.0050							
Surr: 1,2-Dichloroethane-d4	0.047	0	0.05	0	93.7	76 - 125			
Surr: 4-Bromofluorobenzene	0.049	0	0.05	0	97.9	80 - 120			
Surr: Dibromofluoromethane	0.047	0	0.05	0	94.3	80 - 119			
Surr: Toluene-d8	0.050	0	0.05	0	99.4	81 - 118			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355233 (0)		Instrument: VOA5		Method: VOLATILES BY SW8260C					
LCS		Sample ID: VLCSS1-012820		Units: mg/Kg		Analysis Date: 28-Jan-2020 17:27			
Client ID:		Run ID: VOA5_355233		SeqNo: 5450814		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1,1-Trichloroethane	0.046	0.0050	0.05	0	91.1	72 - 130			
1,1,2,2-Tetrachloroethane	0.047	0.0050	0.05	0	94.2	71 - 124			
1,1,2-Trichlor-1,2,2-trifluoroethane	0.047	0.0050	0.05	0	94.6	70 - 130			
1,1,2-Trichloroethane	0.049	0.0050	0.05	0	97.7	78 - 117			
1,1-Dichloroethane	0.051	0.0050	0.05	0	103	76 - 128			
1,1-Dichloroethene	0.050	0.0050	0.05	0	101	72 - 130			
1,2,4-Trichlorobenzene	0.046	0.0050	0.05	0	92.9	70 - 128			
1,2-Dibromo-3-chloropropane	0.051	0.0050	0.05	0	101	70 - 128			
1,2-Dibromoethane	0.046	0.0050	0.05	0	92.0	78 - 120			
1,2-Dichlorobenzene	0.051	0.0050	0.05	0	103	79 - 121			
1,2-Dichloroethane	0.048	0.0050	0.05	0	95.6	77 - 120			
1,2-Dichloropropane	0.050	0.0050	0.05	0	101	77 - 121			
1,3-Dichlorobenzene	0.047	0.0050	0.05	0	94.1	78 - 121			
1,4-Dichlorobenzene	0.051	0.0050	0.05	0	102	78 - 120			
2-Butanone	0.083	0.010	0.1	0	83.0	70 - 128			
2-Hexanone	0.088	0.010	0.1	0	88.2	72 - 127			
4-Methyl-2-pentanone	0.093	0.010	0.1	0	92.5	70 - 128			
Acetone	0.080	0.020	0.1	0	79.5	70 - 130			
Benzene	0.049	0.0050	0.05	0	98.4	75 - 124			
Bromodichloromethane	0.047	0.0050	0.05	0	94.8	78 - 122			
Bromoform	0.046	0.0050	0.05	0	92.3	74 - 120			
Bromomethane	0.046	0.010	0.05	0	91.7	70 - 130			
Carbon disulfide	0.089	0.010	0.1	0	88.7	70 - 122			
Carbon tetrachloride	0.045	0.0050	0.05	0	89.9	72 - 128			
Chlorobenzene	0.050	0.0050	0.05	0	99.7	78 - 122			
Chloroethane	0.049	0.010	0.05	0	98.7	70 - 130			
Chloroform	0.050	0.0050	0.05	0	99.2	73 - 127			
Chloromethane	0.049	0.010	0.05	0	97.5	70 - 130			
cis-1,2-Dichloroethene	0.050	0.0050	0.05	0	99.3	77 - 125			
cis-1,3-Dichloropropene	0.044	0.0050	0.05	0	87.2	78 - 122			
Cyclohexane	0.045	0.0050	0.05	0	90.8	74 - 126			
Dibromochloromethane	0.043	0.0050	0.05	0	87.0	78 - 120			
Dichlorodifluoromethane	0.047	0.0050	0.05	0	93.9	70 - 130			
Ethylbenzene	0.051	0.0050	0.05	0	101	70 - 123			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355233 (0)		Instrument: VOA5		Method: VOLATILES BY SW8260C					
LCS		Sample ID: VLCSS1-012820		Units: mg/Kg		Analysis Date: 28-Jan-2020 17:27			
Client ID:		Run ID: VOA5_355233		SeqNo: 5450814		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Isopropylbenzene	0.046	0.0050	0.05	0	92.1	78 - 127			
m,p-Xylene	0.091	0.010	0.1	0	91.1	77 - 125			
Methyl acetate	0.044	0.0050	0.05	0	87.1	69 - 123			
Methyl tert-butyl ether	0.051	0.0050	0.05	0	102	70 - 128			
Methylcyclohexane	0.045	0.0050	0.05	0	90.7	77 - 127			
Methylene chloride	0.048	0.010	0.05	0	95.5	71 - 125			
o-Xylene	0.046	0.0050	0.05	0	91.6	78 - 122			
Styrene	0.046	0.0050	0.05	0	92.4	80 - 123			
Tetrachloroethene	0.045	0.0050	0.05	0	90.4	70 - 130			
Toluene	0.048	0.0050	0.05	0	96.3	76 - 122			
trans-1,2-Dichloroethene	0.050	0.0050	0.05	0	101	75 - 128			
trans-1,3-Dichloropropene	0.044	0.0050	0.05	0	87.2	75 - 123			
Trichloroethene	0.050	0.0050	0.05	0	101	78 - 125			
Trichlorofluoromethane	0.047	0.0050	0.05	0	93.9	70 - 130			
Vinyl chloride	0.047	0.0020	0.05	0	94.7	70 - 130			
Xylenes, Total	0.14	0.0050	0.15	0	91.2	77 - 128			
Surr: 1,2-Dichloroethane-d4	0.050	0	0.05	0	100	76 - 125			
Surr: 4-Bromofluorobenzene	0.050	0	0.05	0	100	80 - 120			
Surr: Dibromofluoromethane	0.051	0	0.05	0	103	80 - 119			
Surr: Toluene-d8	0.050	0	0.05	0	99.1	81 - 118			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355233 (0)		Instrument: VOA5		Method: VOLATILES BY SW8260C					
MS		Sample ID: HS20011264-01MS		Units: mg/Kg		Analysis Date: 28-Jan-2020 19:07			
Client ID:		Run ID: VOA5_355233		SeqNo: 5450817		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1,1-Trichloroethane	0.044	0.0048	0.0485	0	90.1	70 - 130			
1,1,2,2-Tetrachloroethane	0.046	0.0048	0.0485	0	95.8	70 - 130			
1,1,2-Trichlor-1,2,2-trifluoroethane	0.047	0.0048	0.0485	0	96.8	70 - 130			
1,1,2-Trichloroethane	0.050	0.0048	0.0485	0	103	70 - 130			
1,1-Dichloroethane	0.050	0.0048	0.0485	0	102	70 - 130			
1,1-Dichloroethene	0.049	0.0048	0.0485	0	101	70 - 130			
1,2,4-Trichlorobenzene	0.040	0.0048	0.0485	0	82.3	70 - 130			
1,2-Dibromo-3-chloropropane	0.037	0.0048	0.0485	0	75.9	70 - 130			
1,2-Dibromoethane	0.043	0.0048	0.0485	0	89.7	70 - 120			
1,2-Dichlorobenzene	0.048	0.0048	0.0485	0	98.8	70 - 130			
1,2-Dichloroethane	0.048	0.0048	0.0485	0	98.3	70 - 130			
1,2-Dichloropropane	0.049	0.0048	0.0485	0	100	70 - 130			
1,3-Dichlorobenzene	0.044	0.0048	0.0485	0	91.4	70 - 130			
1,4-Dichlorobenzene	0.047	0.0048	0.0485	0	97.7	70 - 130			
2-Butanone	0.074	0.0097	0.097	0	75.8	70 - 130			
2-Hexanone	0.074	0.0097	0.097	0	76.4	70 - 130			
4-Methyl-2-pentanone	0.15	0.0097	0.097	0	155	70 - 128			S
Acetone	0.18	0.019	0.097	0	186	70 - 130			S
Benzene	0.049	0.0048	0.0485	0	100	70 - 130			
Bromodichloromethane	0.059	0.0048	0.0485	0	121	70 - 130			
Bromoform	0.039	0.0048	0.0485	0	80.5	70 - 130			
Bromomethane	0.043	0.0097	0.0485	0	87.8	70 - 130			
Carbon disulfide	0.073	0.0097	0.097	0	75.4	70 - 130			
Carbon tetrachloride	0.043	0.0048	0.0485	0	88.5	70 - 130			
Chlorobenzene	0.050	0.0048	0.0485	0	102	70 - 130			
Chloroethane	0.052	0.0097	0.0485	0	108	70 - 130			
Chloroform	0.048	0.0048	0.0485	0	98.9	70 - 130			
Chloromethane	0.048	0.0097	0.0485	0	99.0	70 - 130			
cis-1,2-Dichloroethene	0.048	0.0048	0.0485	0	99.8	70 - 130			
cis-1,3-Dichloropropene	0.037	0.0048	0.0485	0	76.7	70 - 130			
Cyclohexane	0.044	0.0048	0.0485	0	90.5	74 - 126			
Dibromochloromethane	0.038	0.0048	0.0485	0	78.9	70 - 130			
Dichlorodifluoromethane	0.047	0.0048	0.0485	0	96.2	70 - 130			
Ethylbenzene	0.052	0.0048	0.0485	0	107	70 - 130			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355233 (0)		Instrument: VOA5		Method: VOLATILES BY SW8260C					
MS		Sample ID: HS20011264-01MS		Units: mg/Kg		Analysis Date: 28-Jan-2020 19:07			
Client ID:		Run ID: VOA5_355233		SeqNo: 5450817		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Isopropylbenzene	0.047	0.0048	0.0485	0	96.5	70 - 130			
m,p-Xylene	0.092	0.0097	0.097	0	94.9	70 - 130			
Methyl acetate	0.039	0.0048	0.0485	0	81.0	69 - 123			
Methyl tert-butyl ether	0.048	0.0048	0.0485	0	98.2	70 - 130			
Methylcyclohexane	0.056	0.0048	0.0485	0	116	77 - 127			
Methylene chloride	0.045	0.0097	0.0485	0	93.4	70 - 130			
o-Xylene	0.047	0.0048	0.0485	0	96.7	70 - 130			
Styrene	0.044	0.0048	0.0485	0	91.4	70 - 130			
Tetrachloroethene	0.045	0.0048	0.0485	0	92.3	70 - 130			
Toluene	0.049	0.0048	0.0485	0	101	70 - 130			
trans-1,2-Dichloroethene	0.049	0.0048	0.0485	0	101	70 - 130			
trans-1,3-Dichloropropene	0.037	0.0048	0.0485	0	76.7	70 - 130			
Trichloroethene	0.050	0.0048	0.0485	0	104	70 - 130			
Trichlorofluoromethane	0.049	0.0048	0.0485	0	100	70 - 130			
Vinyl chloride	0.047	0.0019	0.0485	0	96.0	70 - 130			
Xylenes, Total	0.14	0.0048	0.1455	0	95.5	70 - 130			
Surr: 1,2-Dichloroethane-d4	0.047	0	0.0485	0	96.7	70 - 126			
Surr: 4-Bromofluorobenzene	0.049	0	0.0485	0	102	70 - 130			
Surr: Dibromofluoromethane	0.049	0	0.0485	0	100	70 - 130			
Surr: Toluene-d8	0.049	0	0.0485	0	101	70 - 130			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355233 (0)		Instrument: VOA5		Method: VOLATILES BY SW8260C					
MSD		Sample ID: HS20011264-01MSD		Units: mg/Kg		Analysis Date: 28-Jan-2020 19:32			
Client ID:		Run ID: VOA5_355233		SeqNo: 5450818		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
1,1,1-Trichloroethane	0.043	0.0050	0.0495	0	87.2	70 - 130	0.04370	1.22	30
1,1,2,2-Tetrachloroethane	0.046	0.0050	0.0495	0	92.7	70 - 130	0.04648	1.23	30
1,1,2-Trichlor-1,2,2-trifluoroethane	0.047	0.0050	0.0495	0	95.8	70 - 130	0.04694	1.07	30
1,1,2-Trichloroethane	0.049	0.0050	0.0495	0	98.8	70 - 130	0.05016	2.55	30
1,1-Dichloroethane	0.049	0.0050	0.0495	0	99.6	70 - 130	0.04957	0.576	30
1,1-Dichloroethene	0.047	0.0050	0.0495	0	95.8	70 - 130	0.04890	3.06	30
1,2,4-Trichlorobenzene	0.038	0.0050	0.0495	0	77.7	70 - 130	0.03992	3.77	30
1,2-Dibromo-3-chloropropane	0.036	0.0050	0.0495	0	72.3	70 - 130	0.03680	2.8	30
1,2-Dibromoethane	0.044	0.0050	0.0495	0	88.9	70 - 120	0.04348	1.21	30
1,2-Dichlorobenzene	0.046	0.0050	0.0495	0	93.8	70 - 130	0.04789	3.14	30
1,2-Dichloroethane	0.049	0.0050	0.0495	0	98.2	70 - 130	0.04768	1.92	30
1,2-Dichloropropane	0.049	0.0050	0.0495	0	98.9	70 - 130	0.04874	0.443	30
1,3-Dichlorobenzene	0.043	0.0050	0.0495	0	86.6	70 - 130	0.04435	3.4	30
1,4-Dichlorobenzene	0.046	0.0050	0.0495	0	92.4	70 - 130	0.04736	3.45	30
2-Butanone	0.071	0.0099	0.099	0	71.5	70 - 130	0.07354	3.83	30
2-Hexanone	0.070	0.0099	0.099	0	70.9	70 - 130	0.07409	5.38	30
4-Methyl-2-pentanone	0.15	0.0099	0.099	0	155	70 - 128	0.1503	1.85	30 S
Acetone	0.19	0.020	0.099	0	196	70 - 130	0.1805	7.36	30 S
Benzene	0.048	0.0050	0.0495	0	96.6	70 - 130	0.04871	1.91	30
Bromodichloromethane	0.048	0.0050	0.0495	0	97.3	70 - 130	0.05876	19.9	30
Bromoform	0.037	0.0050	0.0495	0	73.8	70 - 130	0.03902	6.54	30
Bromomethane	0.042	0.0099	0.0495	0	85.6	70 - 130	0.04260	0.553	30
Carbon disulfide	0.068	0.0099	0.099	0	68.9	70 - 130	0.07311	6.97	30 S
Carbon tetrachloride	0.041	0.0050	0.0495	0	83.7	70 - 130	0.04294	3.54	30
Chlorobenzene	0.048	0.0050	0.0495	0	96.8	70 - 130	0.04968	3.65	30
Chloroethane	0.054	0.0099	0.0495	0	110	70 - 130	0.05217	4.25	30
Chloroform	0.048	0.0050	0.0495	0	96.6	70 - 130	0.04797	0.338	30
Chloromethane	0.046	0.0099	0.0495	0	92.6	70 - 130	0.04804	4.7	30
cis-1,2-Dichloroethene	0.048	0.0050	0.0495	0	97.1	70 - 130	0.04842	0.762	30
cis-1,3-Dichloropropene	0.036	0.0050	0.0495	0	73.0	70 - 130	0.03722	3.03	30
Cyclohexane	0.043	0.0050	0.0495	0	86.7	74 - 126	0.04390	2.3	30
Dibromochloromethane	0.038	0.0050	0.0495	0	76.5	70 - 130	0.03826	0.974	30
Dichlorodifluoromethane	0.047	0.0050	0.0495	0	94.5	70 - 130	0.04668	0.243	30
Ethylbenzene	0.050	0.0050	0.0495	0	100	70 - 130	0.05177	4.19	30

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355233 (0)		Instrument: VOA5		Method: VOLATILES BY SW8260C					
MSD		Sample ID: HS20011264-01MSD		Units: mg/Kg		Analysis Date: 28-Jan-2020 19:32			
Client ID:		Run ID: VOA5_355233		SeqNo: 5450818		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Isopropylbenzene	0.044	0.0050	0.0495	0	89.8	70 - 130	0.04681	5.21	30
m,p-Xylene	0.089	0.0099	0.099	0	89.5	70 - 130	0.09209	3.88	30
Methyl acetate	0.041	0.0050	0.0495	0	82.4	69 - 123	0.03928	3.71	30
Methyl tert-butyl ether	0.049	0.0050	0.0495	0	98.6	70 - 130	0.04761	2.48	30
Methylcyclohexane	0.046	0.0050	0.0495	0	93.0	77 - 127	0.05620	19.8	30
Methylene chloride	0.044	0.0099	0.0495	0	89.7	70 - 130	0.04529	2.02	30
o-Xylene	0.045	0.0050	0.0495	0	90.4	70 - 130	0.04691	4.74	30
Styrene	0.043	0.0050	0.0495	0	86.8	70 - 130	0.04433	3.18	30
Tetrachloroethene	0.044	0.0050	0.0495	0	88.9	70 - 130	0.04477	1.78	30
Toluene	0.048	0.0050	0.0495	0	97.4	70 - 130	0.04900	1.66	30
trans-1,2-Dichloroethene	0.047	0.0050	0.0495	0	95.8	70 - 130	0.04890	3.06	30
trans-1,3-Dichloropropene	0.036	0.0050	0.0495	0	73.0	70 - 130	0.03722	3.03	30
Trichloroethene	0.051	0.0050	0.0495	0	103	70 - 130	0.05043	0.779	30
Trichlorofluoromethane	0.048	0.0050	0.0495	0	96.9	70 - 130	0.04869	1.52	30
Vinyl chloride	0.046	0.0020	0.0495	0	92.5	70 - 130	0.04654	1.6	30
Xylenes, Total	0.13	0.0050	0.1485	0	89.8	70 - 130	0.1390	4.17	30
Surr: 1,2-Dichloroethane-d4	0.049	0	0.0495	0	99.4	70 - 126	0.04688	4.88	30
Surr: 4-Bromofluorobenzene	0.049	0	0.0495	0	99.7	70 - 130	0.04924	0.192	30
Surr: Dibromofluoromethane	0.048	0	0.0495	0	97.6	70 - 130	0.04863	0.606	30
Surr: Toluene-d8	0.050	0	0.0495	0	100	70 - 130	0.04876	1.83	30
The following samples were analyzed in this batch:									
HS20011129-01			HS20011129-02			HS20011129-03			

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

QC BATCH REPORT

Batch ID: R355350 (0)		Instrument: Balance1		Method: MOISTURE					
DUP	Sample ID: HS20011129-03DUP	Units: wt%		Analysis Date: 29-Jan-2020 10:29					
Client ID: SB-3 4-8	Run ID: Balance1_355350		SeqNo: 5453255		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Percent Moisture	15	0.0100					15	0	20
The following samples were analyzed in this batch:									
HS20011129-01 HS20011129-02 HS20011129-03									

Client: Phase Engineering, Inc.
Project: 100 East Little York Road
WorkOrder: HS20011129

**QUALIFIERS,
ACRONYMS, UNITS**

Qualifier	Description
*	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

Acronym	Description
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

Unit Reported	Description
mg/Kg-dry	Milligrams per Kilogram- Dry weight corrected
mg/L	Milligrams per Liter
wt%	

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	19-028-0	27-Mar-2020
California	2919, 2019-2020	30-Apr-2020
Dept of Defense	ANAB L2231	20-Dec-2021
Florida	E87611-28	30-Jun-2020
Illinois	2000322019-2	09-May-2020
Kansas	E-10352 2019-2020	31-Jul-2020
Kentucky	123043, 2019-2020	30-Apr-2020
Louisiana	03087, 2019-2020	30-Jun-2020
Maryland	343, 2019-2020	30-Jun-2020
North Dakota	R-193 2019-2020	30-Apr-2020
Oklahoma	2019-067	31-Aug-2020
Texas	T104704231-19-25	30-Apr-2020

Sample Receipt Checklist

Client Name: Phase
Work Order: HS20011129

Date/Time Received: **24-Jan-2020 15:40**
Received by: **PS**

Checklist completed by: Paresh M. Giga 24-Jan-2020
eSignature Date

Reviewed by: Corey Grandits 27-Jan-2020
eSignature Date

Matrices: **Soil/Water**Carrier 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 ☒

VOA/TX1005/TX1006 Solids in hermetically sealed vials? Yes ☒ No ☐ Not Present ☐

Chain of custody present? Yes ☒ No ☐ 1 Page(s)

Chain of custody signed when relinquished and received? Yes ☒ No ☐ COC IDs:214277

Samplers name present on COC? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☐ No ☒

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Container/Temp Blank temperature in compliance? Yes ☒ No ☐

Temperature(s)/Thermometer(s): 1.4c U/C IR25

Cooler(s)/Kit(s): 45575

Date/Time sample(s) sent to storage: 1/24/2020 17:10

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: Depths Differ :
COC - SB-1 4-6 Labels - SB-1 4-8
SB-2 4-8 labels missing depths

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

Chain of Custody Form

COC ID: 214277

Page 1 of 1

HS20011129

Phase Engineering, Inc.
100 East Little York Road



Project Information
ALS Project Manager:

Customer Information		Project Information	
Purchase Order	202001046	Project Name	100 East Little York Road
Work Order		Project Number	Houston TX 77076
Company Name	Phase Engineering, Inc.	Bill To Company	Phase Engineering, Inc.
Send Report To	Ross Doctoroff	Invoice Attn	Claudia Pedraza-AP
Address	5524 Cornish Street	Address	5524 Cornish Street
City/State/Zip	Houston, TX 77007	City/State/Zip	Houston TX 77007
Phone	(713) 476-9844	Phone	(713) 476-9844
Fax	(713) 476-9797	Fax	(713) 476-9797
e-Mail Address	ross@PhaseEngineering.com	e-Mail Address	Claudia@phaseengineering.com

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	SB-1	01/24/2020	0920 AM	S	8.9	6	X	X	X	X	X	X	X	X	X	X	X
2	SB-2	01/24/2020	1110 AM	S	8.9	6	X	X	X	X	X	X	X	X	X	X	X
3	SB-3	01/24/2020	0150 PM	S	8.9	6	X	X	X	X	X	X	X	X	X	X	X
4	TMW-1	01/24/2020	1205 PM	W	1.8	6	X	X	X	X	X	X	X	X	X	X	X
5	TMW-2	01/24/2020	1200 PM	W	1.8	6	X	X	X	X	X	X	X	X	X	X	X
6	TMW-3	01/24/2020	1335 PM	W	1.8	6	X	X	X	X	X	X	X	X	X	X	X
7		01/24/2020		W	1.8	6	X	X	X	X	X	X	X	X	X	X	X
8																	
9																	
10																	

Sampler(s) Please Print & Sign: *[Signature]*

Received by: *[Signature]* Date: *01/24/2020* Time: *0920*

Received by (Laboratory): *[Signature]* Date: *01/24/2020* Time: *0920*

Checked by (Laboratory): *[Signature]* Date: *01/24/2020* Time: *0920*

QC Package: (Check One Box Below)

Level II Std QC ☒ Level III Std QC ☐ Level IV SVA846/CLP ☐ Other ☐

TRRP Checklist ☐ TRRP Level IV ☐

Notes: Phase 100 East Little York Road

Required Turnaround Time: (Check Box)

STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐

Results Due Date: *01/24/2020*

Shipment Method

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NAOH 5-Na₂S₂O₃ 6-NAHSO₄ 7-Other 8-4°C 9-5035

Cooler ID *45575* Cooler Temp. *4.2*

Copyright 2011 by ALS Environmental.

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.

 ALS 10450 Stanciliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	Date: <u>0</u> Name: _____ Company: _____

CUSTODY SEAL Date: <u>12/24/2020</u> Time: <u>1:00</u> Name: <u>Christina Martinez</u> Company: <u>PSI</u>	Seal Broken By: <u>[Signature]</u> Date: <u>1/24/2020</u>
--	--

 ALS 10450 Stanciliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	Date: <u>0</u> Name: _____ Company: _____

CUSTODY SEAL Date: <u>01/24/2020</u> Time: <u>1500</u> Name: <u>Christina Martinez</u> Company: <u>PSI</u>	Seal Broken By: <u>[Signature]</u> Date: <u>1/24/2020</u>
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Phase Engineering, Inc.

Environmental Consultants

January 7, 2020

New Era Life Insurance Company

Lisa Wang

11720 Katy Freeway, #1700

Houston, TX 77079

Phone: (281) 368-7257 Fax: (281) 368-7268 Email: lwang@neweralife.com

We are pleased to make the following proposal for Professional Environmental Services:

Property/Borrower Name or Reference #: KMSH Investments LTD

Current Use: Retail Strip Center

Address/ Property Location: 100 East Little York Road

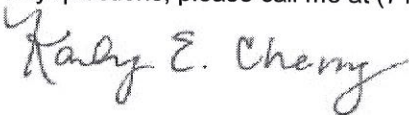
City: Houston County: Harris State: TX Zip: 77076

Perform a limited Phase II Environmental Site Assessment to investigate the potential for soil and groundwater contamination in association with potential undocumented releases from the suspected former onsite dry cleaning plant. The investigation is to include the installation of three (3) soil borings; continuous field screening of soils with an OVM meter; conversion of each soil boring into temporary groundwater monitoring wells; analytical testing of selected soil samples and groundwater samples for total petroleum hydrocarbons (TPH) and volatile organic compounds (VOCs); and preparation of a report of findings and conclusions. If groundwater is not encountered before 40' or probe refusal is encountered prior to the groundwater zone, then soil samples will be collected from the bottom of each boring for laboratory analysis.

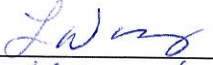
- Includes: Electronic version in PDF with findings, opinions and conclusions. Originals @ \$125.00 each.
- Delivery: Final Report - approximately 12-18 business days from date of signed letter of engagement.
- Terms: Net due prior to receipt of final report.
- Insurance Coverage: \$2,000,000 general and professional liability.

If the above terms and attached Agreement for Professional Environmental Consulting Services (General Terms & Conditions) are acceptable, please sign and fax (eFax 281-200-0060) or email (proposals@phaseengineering.com) a copy of this letter to serve as a letter of engagement and notification to proceed.

By signing below, the client acknowledges the responsibility to arrange for access granted by the owner of the property under investigation. Phase Engineering, Inc. will perform project when owner has granted access to Phase Engineering. Thank you for the opportunity to work with you and your environmental needs. If you have any questions, please call me at (713) 476-9844 or 1-800-419-8881.



Karly Cherry
Senior Project Manager

Accepted By: 

Print Name: Lisa Wang

Date: 1/8/20

AGREEMENT FOR PROFESSIONAL ENVIRONMENTAL CONSULTING SERVICES

Section 1 – General Terms and Conditions

1.1 Definitions

“Agreement” means this Agreement for Professional Environmental Consulting Services.

“Party” (or collectively, “Parties”) means PEI and Client, unless expressly stated otherwise in this Agreement.

“PEI” means Phase Engineering, Inc.

“Engagement Letter” the instrument delivered by PEI to the Parties

“Services” has the meaning set forth in Section 1.2 below.

Any capitalized terms not otherwise defined in this Agreement have the meanings given to them under the Engagement Letter.

1.2 Services

The professional environmental consulting services to be provided by PEI for the Client are set forth in the Engagement Letter, and such services, including subsequent services, changed, altered or additional services are hereinafter called the “Services”.

1.3 Standard of Care

PEI shall perform the services under this agreement with that degree of care, skill and diligence generally accepted as typical of the industry in the performance of such services as contemplated by the Agreement at the time and location such services are rendered. PEI shall employ only competent staff and sub-contractors who will be under the supervision of a senior member of PEI’s staff.

1.4 Rights of Entry, Site Information and Utilities

The Client shall provide right of entry for PEI and its subcontractors to carry out the Services, unless specified otherwise in the Engagement Letter. The Client warrants that it has furnished to PEI all information known to, or in possession or control of, the Client relating to the past and existing conditions of the site, including but not limited to soil and geologic data, contaminants, wastes, petroleum products, controlled substances, hazardous materials, and subsurface utilities. The Client shall extend use and reliance of this information to PEI, unless stated otherwise and to the extent permitted by law. Such information shall be and remain confidential as between the Client and PEI and PEI shall not disclose same to any third party unless required by law.

1.5 Safety

1.5.1 PEI maintains a General Health and Safety Plan, a copy of which will be provided to the Client on written request and will fall under Section 1.8 Subsequent Changes of this Agreement unless this service is included in the Engagement Letter.

1.5.2 PEI shall take every precaution reasonable in the circumstances for the protection of the workers providing any of the Services. When required and prior to any field work being carried out, PEI shall provide the Client with a comprehensive site-specific safety plan for providing the Services. Such request must be made in writing by the Client prior to commencement of the Services by PEI and will fall under Section 1.9 Subsequent Changes of this Agreement unless included in the Engagement Letter.

1.6 Investigations and Reports

1.6.1 Findings: The findings of any investigation undertaken as part of the Services will be based upon information generated as a result of the specific scope of the Services as described in the Engagement Letter.

1.6.2 Restoration: The Client accepts that in the normal course of the Services some damage to existing ground or other surface finishes may occur, the restoration of which shall be the responsibility of the client or as specified in the Engagement Letter.

1.6.3 Investigations: The parties acknowledge and accept that unique risks exist whenever engineering or related disciplines are applied to identify environmental conditions and even a comprehensive sampling and testing program may fail to detect certain conditions. Because of the inherent uncertainties in environmental evaluations, changed or unanticipated conditions may occur or become known subsequent to PEI’s investigation that could affect conclusions, recommendations, total Project cost and/or execution. Changes in conditions are subject to amendments to the Scope of Services.

1.6.4 Confidentiality and Reliance: Any Final Report or draft reports and the information contained therein shall be treated as confidential and, unless otherwise agreed to by PEI and the Client, the information, sampling data, analysis, findings, conclusions and recommendations (if any), may be used and relied upon only by the Client, its officers, directors and employees and professional advisors in the performance of their obligations for or on behalf of the Client. Any such use and reliance shall be subject to the limitations set forth in this agreement. In addition, the Client may submit any report to a regulatory authority or lender for the purpose of obtaining financing on a property.

1.6.5 Third Party Reliance: This Agreement and the Services provided are for Consultant and Client’s sole benefit and exclusive use with no third party beneficiaries intended. Reliance upon the Services and any work product is limited to Client, and is not intended for third parties. In the event PEI agrees, in its sole and absolute discretion, to make the Report available to a third party not mentioned in Paragraph 1.6.4, the Third Party shall be required to obtain the original Client’s release, sign PEI’s standard Authorized User Agreement (AUA) and pay PEI a fee of not less than \$350.00. Any such use shall be subject to the terms, conditions and limitations set forth in this Agreement, the Report and the AUA.

1.7 Ownership of Records/Reports:

All documents or records created or prepared by PEI in the performance of the Services are considered PEI’s professional work product and shall remain the copyright property of PEI, subject to any reasonable disclosure request from the Client as may be necessary and for which reasonable reimbursement for copies is provided.

1.8 Disposal and Samples

1.8.1 Disposal of all wastes generated from the subject property shall be the responsibility of the Client.

1.8.2 PEI shall be responsible for appropriate disposal of sample material and sample residuals after 30 days following submission of the Final Report unless the Client specifically requests otherwise.

1.9 Subsequent Changes

With the consent of PEI, the Client may in writing at any time after the execution of this Agreement or the commencement of the Services delete, extend, increase, vary or otherwise alter the Services. The Parties further agree that such changes shall alter the Services, schedule and/or the costs. Any such changes shall be made in writing with reference to this Agreement, and accepted in writing by both Parties.

1.10 Delays

Neither Party shall be liable or penalized for delays or failure to perform its Services if the same is caused directly or indirectly by circumstances beyond a Party's reasonable control. The Client shall not hold PEI responsible for damages or delays in performance caused by the Client, acts of God, acts and/or omissions of governmental authorities and regulatory agencies or other events which are beyond the reasonable control of the Parties.

1.11 Payment

- 1.11.1 The PEI shall invoice the Client in accordance with the provisions set forth in the Engagement Letter. Except as stated in the Engagement Letter, the Client shall pay to PEI at its corporate office each invoice within 30 days of the date of the invoice without holdback. Interest at a rate of 1.5% per month or the maximum rate allowed by law, whichever is lower, may be charged on all overdue amounts.
- 1.11.2 In the event of a disputed billing, only the disputed portion will be withheld from payment, and the undisputed portion will be paid. The Client shall exercise reasonableness in disputing any bill or portion thereof. No interest will accrue on any disputed portion of the billing until mutually resolved.
- 1.11.3 If the Client fails to make payment of any sum due hereunder within a reasonable time period, Client acknowledges and agrees that the subject Invoice will be referred to legal collections, and any amount in aggregate less than Ten Thousand Dollars U.S. (\$10,000) will be referred to small claims court in Harris County, Texas.

1.12 Suspension or Termination

The Client may at any time by notice in writing to PEI, suspend or terminate the Services or any portion thereof at any stage of the Project. Upon receipt of such written notice by the Client, PEI shall perform no further Services other than those reasonably necessary to close out its Services. In such an event, PEI shall invoice the Client for the portion of the Services completed and shall be entitled to payment in accordance with Section 1.9. Once the Services are completed the Client assumes the risk of Frustration of Purpose.

1.13 Insurance

- 1.13.1 PEI agrees to carry and maintain the following **minimum** insurance coverages for the term of this Agreement:
 - Worker's Compensation Insurance: Statutory requirement amounts
 - Commercial General Liability: \$1,000,000 per occurrence
 - Automobile Liability Insurance: \$1,000,000 per occurrence for both owned and non-owned vehicles
 - Professional Liability and Contractors Professional Insurance: \$1,000,000 per occurrence
- 1.13.2 PEI's current Certificate of Insurance is provided with the Engagement Letter. If the Client requests to be a named as a certificate holder, this request must be made in writing to PEI prior to commencement of the Services.
- 1.13.3 PEI will renew the Professional Liability Insurance at or above the minimum coverage for period of two (2) years after completion of the Services.
- 1.13.4 If the Client requests that PEI increase the amount of insurance coverage or obtain other special insurance for the Project, PEI shall endeavor forthwith to obtain such increased or special insurance at the Client's expense.
- 1.13.5 Each of PEI and Client waive all claims, losses, damages and rights of recovery against the other to extent of the limits of coverage under any commercial general liability or property insurance policy actually obtained by a Party to this Agreement (or, in the case of PEI, to the extent obtained or required to be obtained by PEI under this Agreement). In addition, each Party shall exercise commercially reasonable efforts to cause to waive subrogation under its commercial general liability and property insurance policies and provide any necessary endorsements thereto.

1.14 Indemnity/Statute of Limitations.

EACH OF PEI AND CLIENT SHALL INDEMNIFY AND HOLD HARMLESS THE OTHER AND THEIR RESPECTIVE AGENTS, EMPLOYEES, SUCCESSORS AND ASSIGNS FROM AND AGAINST LEGAL LIABILITY FOR CLAIMS, LOSSES, DAMAGES, AND EXPENSES TO THE EXTENT SUCH CLAIMS, LOSSES, DAMAGES, OR EXPENSES ARE LEGALLY DETERMINED TO BE CAUSED BY THEIR NEGLIGENT ACTS, ERRORS, OR OMISSIONS. IN THE EVENT SUCH CLAIMS, LOSSES, DAMAGES, OR EXPENSES ARE LEGALLY DETERMINED TO BE CAUSED BY THE JOINT OR CONCURRENT NEGLIGENCE OF PEI AND CLIENT, THE PARTIES SHALL BEAR LIABILITY IN PROPORTION TO ITS OWN NEGLIGENCE UNDER COMPARATIVE FAULT PRINCIPLES. NEITHER PARTY SHALL HAVE A DUTY TO DEFEND THE OTHER PARTY, AND NO DUTY TO DEFEND IS HEREBY CREATED BY THIS INDEMNITY PROVISION AND SUCH DUTY IS EXPLICITLY WAIVED UNDER THIS AGREEMENT. CAUSES OF ACTION ARISING OUT OF PEI'S SERVICES OR THIS AGREEMENT, REGARDLESS OF CAUSE OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY OR OTHER RECOVERY, SHALL BE DEEMED TO HAVE ACCRUED AND THE APPLICABLE STATUTE OF LIMITATIONS SHALL COMMENCE TO RUN NO LATER THAN THE DATE OF PEI'S SUBSTANTIAL COMPLETION OF SERVICES ON THE PROJECT.

1.15 Limitation of Liability.

- 1.15.1 Notwithstanding any other provisions contained herein, it is understood and agreed that PEI's liability to the Client for all claims arising out of this Agreement, or in any way relating to the Services, will be limited to direct damages and/or to the specific performance of any Services not meeting the Standard of Care set forth herein and such liability will, in the aggregate, not exceed the sum of the coverages shown on PEI's Certificate of Insurance in effect at the time of the claim.
- 1.15.2 No claim may be brought against PEI more than Two (2) years after the Services were completed under this Agreement, or as negotiated between PEI and the Client.

1.15.3. TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF PEI (AND ITS DIRECTORS, EMPLOYEES, AGENTS AND AFFILIATES) TO CLIENT AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE GREATER OF \$50,000 OR PEI'S FEE FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF PEI'S SERVICES OR THIS AGREEMENT. THIS LIMITATION SHALL APPLY REGARDLESS OF AVAILABLE PROFESSIONAL LIABILITY INSURANCE COVERAGE, CAUSE OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY; PROVIDED, HOWEVER, THAT THIS LIMITATION SHALL NOT APPLY TO THE EXTENT OF ANY AVAILABLE COVERAGE UNDER PEI'S COMMERCIAL GENERAL LIABILITY POLICY.

1.16 Consequential Damages.

EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR LOSS OF PROFITS OR REVENUE, LOSS OF USE OR OPPORTUNITY, LOSS OF GOOD WILL, COST OF SUBSTITUTE FACILITIES, GOODS, OR SERVICES, COST OF CAPITAL, OR FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES.

1.17 Regulatory Reporting Requirements

Client recognizes that hazardous substances or contaminants may be discovered at the subject property in the course of provision of the Services by PEI under conditions that may be reportable to Federal or State environmental regulatory agencies. The "duty to report" is ultimately the responsibility of the landowner unless the condition represents an acute threat to human health or the environment. PEI will notify the Client of any such reportable condition. The Client will notify the Landowner, or under mutual agreement, authorize PEI to perform such notification to the landowner.

Section 2 – MISCELLANEOUS PROVISIONS

2.1 Notices:

All notices under this Agreement shall be in writing. It shall be sufficient in all respects if the Notice is delivered by hand, sent by any electronic means, including email or facsimile transmission, with confirmation ("Transmission") during normal business hours, or sent by registered mail, postage prepaid, addressed to the Parties shown on the Engagement Letter or to such other address as either Party shall designate by written notice to the other Party. Any notice so given shall be deemed to have been given and to have been received on the day of delivery, if so delivered, on the third Business Day (excluding each day during which there exists any interruption of postal services due to strike, lockout or other cause) following the mailing thereof, if so mailed, and on the day that notice was sent by Transmission, provided such day is a Business Day (a Business Day being any day of the week save and except for Saturday and Sunday) and if not, on the first Business Day thereafter.

2.2 Entire Agreement, Modifications, Headings, Severability:

The Parties acknowledge that this Agreement and the Engagement Letter constitutes the entire agreement between them and supersedes all prior representations, warranties, agreements, and understandings, oral or written, between the Parties with respect to its subject matter. Unless stated otherwise in this Agreement, this Agreement may not be modified except in writing signed by both Parties. The headings to this Agreement are for convenience and reference purposes only and shall not constitute a part of the Agreement. If any element of this Agreement is later held to violate the law or a regulation, it shall be deemed void, and all remaining provisions shall continue in force.

2.3 Effect:

This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns provided that it may not be assigned by either Party without the consent of the other, which consent shall not be unreasonably withheld.

2.4 Survival:

All representations and obligations (including without limitation the mutual obligations of indemnification) shall survive the termination of this Agreement and expire five (5) years from the date of completion of Services.

2.5 Waiver of Rights:

Any waiver of, or consent to depart from, the requirements of any provision of this Agreement shall be effective only if made in writing and signed by the Party granting such waiver or consent, and is valid only in the specific instance and for the specific purpose for which it has been granted. No failure on the part of any Party to exercise, and no delay in exercising, any right under this Agreement shall operate as a waiver of such right. No single or partial exercise of any such right shall preclude any other or further exercise of such right or the exercise of any other right.

2.6 Applicable Law:

This Agreement shall be governed by, and interpreted and enforced in accordance with, the laws in the State of Texas and the laws of The United States of America, as applicable.

2.7 Dispute Resolution:

Excepting Section 1.11 for the purpose of this Agreement, any disagreement arising between the Parties to this Agreement with reference to the interpretation of this Agreement or any matter arising hereunder and upon which the Parties cannot agree shall be referred to mediation. Reference to mediation shall be to a single mediator and in accordance with the laws of mediation in the State of Texas. The costs of the mediator shall be shared equally by the Parties on an interim basis as may be necessary provided however that the mediator shall have the discretion to award costs of the proceeding, including costs of the mediator. The venue for such mediation is agreed to be Harris County, Texas

2.8 Contract Documents:

The Contract Documents consist of the documents listed. If there is a conflict with the Contract Documents, the conflicting terms will be governed in the order of priority set forth as follows: 1. Agreement 2. Engagement Letter