Environmental & Safety Solutions, Inc.

Electronic Correspondence

June 22, 2015

Kellie Jones
State of New Mexico
Oil Conservation Division
1625 N. French Dr.
Hobbs, New Mexico 88240
kellie.jones@state.nm.us

Re: **Assessment Corrective Action Plan**
SOGO III, LLC, State 20 Battery - **RP No**.: 3674
API No.: 30-025-28421
Legal: Unit B – Sec 20 – T23S – R36E – 660 FSL, 1980 FEL - Lea Co., NM
GPS: 32.295464, -103.284939
Depth to Groundwater: 75 – 100 ft bgs
Release Type: Crude Oil

Contaminants of Concern (COC's)	**Threshold Levels**
Total Petroleum Hydrocarbons (TPH)	1000 mg/kg
Benzene	10 mg/kg
BTEX	50 mg/kg

Dear Kellie:

Etech Environmental & Safety Solutions, Inc. (Etech) is pleased to submit the following corrective action plan on the aforementioned site for your review and approval.

Background
The release occurred due to failure on the tank at a small point of external corrosion. The release migrated northwest on the pad, then migrated eastward off site and followed a narrow surface channel to a depression where the majority of the release pooled. The impacted area of the pad and the surface channel appeared to be surficial and limited to the first 2 feet. The majority of the spill had collected in the pooled area. A copy of the C-141 is provided in Attachment A. An annotated aerial photograph showing the release area and TPH levels is provided In Attachment B. Photographs of the release area are provided in Attachment C.

Scope of Work
The scope of this project is for the remediation of a hydrocarbon impact. Completion of remediation will involve the following actions:

1. Placement of a one-call for utility location.
2. Excavation of impacted soils as far as practicable or until COC threshold levels less regulatory threshold than are reached. Preliminary assessment data indicated the hydrocarbon levels were below regulatory threshold levels at a depth of 6-7 feet.

3. Please note: The delineation data was collected from the lowest point of the impacted area where it was evident liquids had pooled. The assessment map includes the delineation data and the sampling points (SP's) that will be used to determine that the excavation has reached remediation objectives. A copy of the analyses along with a summary table is provided in Attachment D.
4. Confirmation samples will be collected from the bottom and the sidewalls of the excavation and analyzed for the contaminants of concern (COC's) to confirm excavation goals have been reached.
5. If the results of analysis determine that the hydrocarbon levels are above regulatory threshold levels, additional excavation will be performed until the remediation objectives are met. It should be noted that due to the depth of the impact from the delineation, there may be circumstances that arise where additional excavation is not practical. This includes reaching the limits of excavation with hydrocarbons that are close to objective levels, safety issues such as the close proximity of equipment, or other site specific issues. In this event, it will be likely to install a liner at the bottom of the excavation before backfilling.
6. The impacted soil will be placed on the production pad on 20 mil plastic covered with approximately 6 inches of clean material, spread the impacted soil, then add biological amendment to the soils to treat the COC's to acceptable levels. Chlorides will not be analyzed since this was only any oil release.
7. The amendment will be blended by tilling (hence the use of the 6 inches of clean soil to protect the liner). The area will then be gridded with each section to represent 20 cubic yards. Each grid will be numbered, sampled, and analyzed for the COC's.
8. The area will be periodically blended, sampled and analyzed until the COC's are below threshold levels. As grids clear they will be isolated and treatment will focus on the grids that are still elevated. Also, if a grid clears for one of the COC's but the others are eliminated, the additional analyses in the grid will focus on the specific elevated COC(s).
9. Once remediation levels are reached, the soil will be used in conjunction with reinforcing the battery containment system.
10. The excavation will be backfilled with clean soil from the adjoining areas, properly contoured, and seeded to match the region using the recommended mixture from the BLM. Where pad areas or interior areas of tank batteries are excavated, they will be backfilled to within 6 inches of surface with native soil then backfilled to grade with compacted caliche. Any firewalls or containment berms removed during remediation will be reinstalled.

Notifications and Special Conditions

1. The State Land Office (SLO) and OCD will be notified prior to the commencement of on-site operations.
2. The OCD will be notified prior to each sampling event to allow the opportunity to witness the sampling events. Splits will be made available if requested.
3. The SLO and OCD will be notified when the site is closed for final inspection prior to seeding.
4. A final report documenting the closure of the site will be submitted along with a final C-141 to SLO and OCD.

Thank you for your assistance on this matter. Should you have any questions, require additional information, or have any additional stipulations for this site, please contact Kit Prichard or myself at (432) 563-2200 (office) or via email at fred@etechenv.com, or Kit@etechenv.com.

Respectfully:

Fred Holmes
Principal Environmental Professional

Cc: dvstrang@slo.state.nm.us

Attachment A
Initial C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: SOGO III LLC	Contact: Bill Priebe
Address: PO BOX 210 Midland, Tx 79702	Telephone No.: 432-640-0040
Facility Name: State 20	Facility Type: Tank Battery

Surface Owner: State	Mineral Owner: State	API No.: 3002528421

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	20	23S	36E	660	NL	1980	EL	Lea County

Latitude: 32.295464 **Longitude:** -103.284939

NATURE OF RELEASE

Type of Release: Oil	Volume of Release: 200 BBL	Volume Recovered: 1 BBL
Source of Release: Tank Battery	Date and Hour of Occurrence: 04/08/2015 09:02PM	Date and Hour of Discovery: 04/08/2015 09:02PM
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD Hobbs	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. 04/09/15	

If a Watercourse was Impacted, Describe Fully.*:

Describe Cause of Problem and Remedial Action Taken.*: Release occurred at the First Tank next to the water tank. Initial response was to remove free standing fluid from the surface to prevent further vertical migration. Impacted soils were stored on location for disposal.

Describe Area Affected and Cleanup Action Taken.* : Release went off location from the battery and down into a low area and proceeded East for approximately 150', with the spill width from 1-3' wide.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Billy M. Priebe	OIL CONSERVATION DIVISION	
Printed Name: Billy M. Priebe	Approved by District Supervisor:	
Title: Ex. VP - Operations	Approval Date:	Expiration Date:
E-mail Address: bpriebe@stanolind.com	Conditions of Approval:	Attached ☐
Date: 5/6/15 Phone: 432-640-0040		

* Attach Additional Sheets If Necessary

Attachment B
Annotated Aerial Imagery

eTECH Environmental & Safety Solutions, Inc.	Delineation & Assessment Report ©	Lease Name:	State 20	Project No.:	584-6106-000
		Date Assessed:	April 16, 2015		

Assessment Results

Sample I.D.	Depth (ft.)	TPH (mg/kg)
SP1	0-12"	1550
SP1	12-24"	1390
SP1	24-36"	414
SP2	0-12"	44600
SP2	12-24"	34200
SP2	24-36"	35100
SP2	36-42"	32000
SP2	4-5'	21400
SP2	5-6'	13300
SP2	6-7'	2070
SP2	7-8'	168

Attachment C
Photograph Log

Photo No: **1.**	
Direction Taken: ***East***	
Description: ***Lease Sign.***	

Photo No: **2.**	
Direction Taken: ***East***	
Description: ***Full picture of the battery.***	

Photo No: **3.**	
Direction Taken: ***North***	
Description: ***Spill area in front of the meter house.***	

Photo No: **4.**	
Direction Taken: ***Northeast***	
Description: ***Beginning of the spill running into the pasture behind the meter house.***	

Photo No: **5.**	
Direction Taken: ***East***	
Description: ***The turn of the spill run going East.***	

Photo No: **6.**	
Direction Taken: ***West***	
Description: ***End of the spill run.***	

Attachment D
Analytical Results

Analytical Report 506692

for

Etech Environmental & Safety Solution, Inc

Project Manager: Kit Prichard

State 20

584-6106-000

30-APR-15

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-18), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

30-APR-15

Project Manager: **Kit Prichard**
Etech Environmental & Safety Solution, Inc
P.O. Box 8469
Midland, TX 79708

Reference: XENCO Report No(s): **506692**
State 20
Project Address: TX

Kit Prichard:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 506692. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 506692 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 506692

Etech Environmental & Safety Solution, Inc, Midland, TX

State 20

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample Point 1 0-12	S	04-16-15 08:00	0 - 12 In	506692-001
Sample Point 1 12-24	S	04-16-15 08:05	12 - 24 In	506692-002
Sample Point 1 24-36	S	04-16-15 08:07	24 - 36 In	506692-003
Sample Point 2 0-12	S	04-16-15 08:10	0 - 12 In	506692-004
Sample Point 2 12-24	S	04-16-15 08:15	12 - 24 In	506692-005
Sample Point 2 24-36	S	04-16-15 08:17	24 - 36 In	506692-006
Sample Point 2 36-42	S	04-16-15 08:20	36 - 42 ft	506692-007
Sample Point 2 4'-5'	S	04-16-15 08:22	4 - 5 ft	506692-008
Sample Point 2 4'-5'	S	04-16-15 08:26	5 - 6 ft	506692-009
Sample Point 2 6'-7'	S	04-16-15 08:28	6 - 7 ft	506692-010
Sample Point 2 7'-8'	S	04-16-15 08:30	7 - 8 ft	506692-011

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 506692

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 20

Project Id: 584-6106-000
Contact: Kit Prichard
Project Location: TX

Date Received in Lab: Fri Apr-24-15 11:18 am
Report Date: 30-APR-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	506692-001		506692-002		506692-003		506692-004		506692-005		506692-006	
	Field Id:	Sample Point 1 0-12		Sample Point 1 12-24		Sample Point 1 24-36		Sample Point 2 0-12		Sample Point 2 12-24		Sample Point 2 24-36	
	Depth:	0-12 In		12-24 In		24-36 In		0-12 In		12-24 In		24-36 In	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-16-15 08:00		Apr-16-15 08:05		Apr-16-15 08:07		Apr-16-15 08:10		Apr-16-15 08:15		Apr-16-15 08:17	
BTEX by EPA 8021B	***Extracted:***	Apr-28-15 15:00		Apr-28-15 15:00		Apr-28-15 15:00		Apr-28-15 15:00		Apr-28-15 15:00		Apr-28-15 15:00	
	Analyzed:	Apr-29-15 12:18		Apr-28-15 22:05		Apr-29-15 12:01		Apr-28-15 23:27		Apr-28-15 23:43		Apr-29-15 00:00	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00108	ND	0.00102	ND	0.00103	0.769	0.530	0.474	0.266	0.398	0.264
Toluene		0.120	0.00216	0.0335	0.00204	ND	0.00206	22.3	1.06	16.8	0.533	19.0	0.527
Ethylbenzene		0.305	0.00108	0.104	0.00102	ND	0.00103	39.3	0.530	30.3	0.266	34.8	0.264
m,p-Xylenes		0.715	0.00216	0.262	0.00204	ND	0.00206	90.0	1.06	68.7	0.533	80.0	0.527
o-Xylene		0.328	0.00108	0.119	0.00102	ND	0.00103	36.2	0.530	27.6	0.266	31.7	0.264
Total Xylenes		1.04	0.00108	0.381	0.00102	ND	0.00103	126	0.530	96.3	0.266	112	0.264
Total BTEX		1.47	0.00108	0.519	0.00102	ND	0.00103	189	0.530	144	0.266	166	0.264
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-24-15 17:20		Apr-24-15 17:20		Apr-24-15 17:20		Apr-24-15 17:20		Apr-24-15 17:20		Apr-24-15 17:20	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		8.07	1.00	2.18	1.00	2.93	1.00	6.11	1.00	6.54	1.00	5.54	1.00
TPH By SW8015 Mod	***Extracted:***	Apr-24-15 15:00		Apr-24-15 15:00		Apr-24-15 15:00		Apr-24-15 15:00		Apr-24-15 15:00		Apr-24-15 15:00	
	Analyzed:	Apr-24-15 20:41		Apr-24-15 21:03		Apr-24-15 21:24		Apr-24-15 21:45		Apr-24-15 22:06		Apr-24-15 22:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		111	16.3	109	15.3	16.9	15.4	9230	319	6850	320	6720	317
C12-C28 Diesel Range Hydrocarbons		1240	16.3	1230	15.3	380	15.4	34100	319	26200	320	27400	317
C28-C35 Oil Range Hydrocarbons		203	16.3	48.0	15.3	17.2	15.4	1220	319	1130	320	943	317
Total TPH		1550	16.3	1390	15.3	414	15.4	44600	319	34200	320	35100	317

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 506692

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 20

Project Id: 584-6106-000
Contact: Kit Prichard
Project Location: TX

Date Received in Lab: Fri Apr-24-15 11:18 am
Report Date: 30-APR-15
Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	506692-007		506692-008		506692-009		506692-010		506692-011	
	Field Id:	Sample Point 2 36-42		Sample Point 2 4'-5'		Sample Point 2 4'-5'		Sample Point 2 6'-7'		Sample Point 2 7'-8'	
	Depth:	36-42 ft		4-5 ft		5-6 ft		6-7 ft		7-8 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-16-15 08:20		Apr-16-15 08:22		Apr-16-15 08:26		Apr-16-15 08:28		Apr-16-15 08:30	
BTEX by EPA 8021B	***Extracted:***	Apr-28-15 15:00		Apr-28-15 15:00		Apr-28-15 15:00		Apr-28-15 15:00		Apr-28-15 15:00	
	Analyzed:	Apr-29-15 00:17		Apr-29-15 00:34		Apr-29-15 00:50		Apr-29-15 01:07		Apr-28-15 20:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		0.298	0.259	0.165	0.110	0.119	0.0540	ND	0.0214	ND	0.00106
Toluene		6.01	0.519	7.00	0.220	6.72	0.108	0.355	0.0429	0.00223	0.00213
Ethylbenzene		16.2	0.259	15.8	0.110	14.0	0.0540	1.27	0.0214	0.00694	0.00106
m,p-Xylenes		40.3	0.519	37.1	0.220	31.3	0.108	3.32	0.0429	0.0220	0.00213
o-Xylene		16.6	0.259	15.8	0.110	13.2	0.0540	1.35	0.0214	0.0114	0.00106
Total Xylenes		56.9	0.259	52.9	0.110	44.5	0.0540	4.67	0.0214	0.0334	0.00106
Total BTEX		79.4	0.259	75.9	0.110	65.3	0.0540	6.30	0.0214	0.0426	0.00106
Percent Moisture	***Extracted:***										
	Analyzed:	Apr-24-15 17:20		Apr-24-15 17:20		Apr-24-15 17:20		Apr-24-15 17:20		Apr-24-15 17:20	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.41	1.00	9.30	1.00	7.95	1.00	7.26	1.00	6.20	1.00
TPH By SW8015 Mod	***Extracted:***	Apr-24-15 15:00		Apr-24-15 15:00		Apr-24-15 15:00		Apr-24-15 15:00		Apr-24-15 15:00	
	Analyzed:	Apr-24-15 22:48		Apr-24-15 23:09		Apr-24-15 23:30		Apr-25-15 00:35		Apr-25-15 00:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		5140	314	4180	165	2600	163	335	16.2	16.3	15.9
C12-C28 Diesel Range Hydrocarbons		26000	314	16700	165	10300	163	1680	16.2	152	15.9
C28-C35 Oil Range Hydrocarbons		894	314	567	165	416	163	58.3	16.2	ND	15.9
Total TPH		32000	314	21400	165	13300	163	2070	16.2	168	15.9

Kelsey Brooks
Project Manager

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: State 20

Work Orders : 506692,

Project ID: 584-6106-000

Lab Batch #: 966798 **Sample:** 506692-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/15 20:41

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.3	99.8	98	70-135	
o-Terphenyl	46.3	49.9	93	70-135	

Lab Batch #: 966798 **Sample:** 506692-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/15 21:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.6	99.8	99	70-135	
o-Terphenyl	47.6	49.9	95	70-135	

Lab Batch #: 966798 **Sample:** 506692-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/15 21:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.7	99.6	99	70-135	
o-Terphenyl	47.8	49.8	96	70-135	

Lab Batch #: 966798 **Sample:** 506692-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/15 21:45

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.1	99.7	97	70-135	
o-Terphenyl	47.5	49.9	95	70-135	

Lab Batch #: 966798 **Sample:** 506692-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/15 22:06

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	99.7	116	70-135	
o-Terphenyl	53.8	49.9	108	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: State 20

Work Orders : 506692,

Project ID: 584-6106-000

Lab Batch #: 966798 **Sample:** 506692-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/15 22:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.7	107	70-135	
o-Terphenyl	48.9	49.9	98	70-135	

Lab Batch #: 966798 **Sample:** 506692-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/15 22:48

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	49.4	50.0	99	70-135	

Lab Batch #: 966798 **Sample:** 506692-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/15 23:09

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.3	99.8	88	70-135	
o-Terphenyl	53.5	49.9	107	70-135	

Lab Batch #: 966798 **Sample:** 506692-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/15 23:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	99.9	121	70-135	
o-Terphenyl	58.1	50.0	116	70-135	

Lab Batch #: 966798 **Sample:** 506692-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/25/15 00:35

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	99.9	116	70-135	
o-Terphenyl	55.7	50.0	111	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: State 20

Work Orders : 506692,

Project ID: 584-6106-000

Lab Batch #: 966798 **Sample:** 506692-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/25/15 00:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.7	106	70-135	
o-Terphenyl	52.6	49.9	105	70-135	

Lab Batch #: 967064 **Sample:** 506692-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/28/15 20:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 967064 **Sample:** 506692-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/28/15 22:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 967064 **Sample:** 506692-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/28/15 23:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0340	0.0300	113	80-120	

Lab Batch #: 967064 **Sample:** 506692-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/28/15 23:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: State 20

Work Orders : 506692,

Project ID: 584-6106-000

Lab Batch #: 967064 **Sample:** 506692-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/29/15 00:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0342	0.0300	114	80-120	

Lab Batch #: 967064 **Sample:** 506692-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/29/15 00:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0341	0.0300	114	80-120	

Lab Batch #: 967064 **Sample:** 506692-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/29/15 00:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

Lab Batch #: 967064 **Sample:** 506692-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/29/15 00:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	80-120	

Lab Batch #: 967064 **Sample:** 506692-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/29/15 01:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0347	0.0300	116	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: State 20

Work Orders : 506692,

Project ID: 584-6106-000

Lab Batch #: 967064 **Sample:** 506692-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/29/15 12:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	80-120	

Lab Batch #: 967064 **Sample:** 506692-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/29/15 12:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0345	0.0300	115	80-120	

Lab Batch #: 966798 **Sample:** 691752-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/24/15 18:32

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	52.1	50.0	104	70-135	

Lab Batch #: 967064 **Sample:** 691904-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/28/15 17:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 966798 **Sample:** 691752-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/24/15 18:53

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	57.2	50.0	114	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: State 20

Work Orders : 506692, **Project ID:** 584-6106-000

Lab Batch #: 967064 **Sample:** 691904-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/28/15 18:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 966798 **Sample:** 691752-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/24/15 19:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	59.3	50.0	119	70-135	

Lab Batch #: 967064 **Sample:** 691904-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/28/15 18:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 966798 **Sample:** 506684-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/15 19:56

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	99.9	127	70-135	
o-Terphenyl	52.6	50.0	105	70-135	

Lab Batch #: 967064 **Sample:** 506834-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/28/15 18:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0315	0.0300	105	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: State 20

Work Orders : 506692, **Project ID:** 584-6106-000

Lab Batch #: 966798 **Sample:** 506684-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/15 20:18

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	99.7	127	70-135	
o-Terphenyl	57.5	49.9	115	70-135	

Lab Batch #: 967064 **Sample:** 506834-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/28/15 19:04

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: State 20

Work Order #: 506692 **Project ID:** 584-6106-000

Analyst: ARM **Date Prepared:** 04/28/2015 **Date Analyzed:** 04/28/2015

Lab Batch ID: 967064 **Sample:** 691904-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0969	97	0.100	0.0972	97	0	70-130	35	
Toluene	<0.00200	0.100	0.100	100	0.100	0.100	100	0	70-130	35	
Ethylbenzene	<0.00100	0.100	0.105	105	0.100	0.106	106	1	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.211	106	0.200	0.212	106	0	70-135	35	
o-Xylene	<0.00100	0.100	0.104	104	0.100	0.105	105	1	71-133	35	

Analyst: ARM **Date Prepared:** 04/24/2015 **Date Analyzed:** 04/24/2015

Lab Batch ID: 966798 **Sample:** 691752-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	1050	105	1000	1110	111	6	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1080	108	1000	1160	116	7	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: State 20

Work Order # : 506692 **Project ID:** 584-6106-000

Lab Batch ID: 967064 **QC- Sample ID:** 506834-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/28/2015 **Date Prepared:** 04/28/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.00131	0.112	0.102	90	0.112	0.101	89	1	70-130	35	
Toluene	<0.00224	0.112	0.101	90	0.112	0.0993	89	2	70-130	35	
Ethylbenzene	<0.00112	0.112	0.100	89	0.112	0.0985	88	2	71-129	35	
m,p-Xylenes	<0.00224	0.224	0.201	90	0.224	0.196	88	3	70-135	35	
o-Xylene	<0.00112	0.112	0.100	89	0.112	0.0984	88	2	71-133	35	

Lab Batch ID: 966798 **QC- Sample ID:** 506684-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/24/2015 **Date Prepared:** 04/24/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.1	1010	1110	110	1010	1130	112	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	371	1010	1380	100	1010	1380	100	0	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: State 20

Work Order #: 506692

Lab Batch #: 966910 **Project ID:** 584-6106-000

Date Analyzed: 04/24/2015 17:20 **Date Prepared:** 04/24/2015 **Analyst:** WRU

QC- Sample ID: 506626-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	16.7	17.7	6	20	

Lab Batch #: 966910

Date Analyzed: 04/24/2015 17:20 **Date Prepared:** 04/24/2015 **Analyst:** WRU

QC- Sample ID: 506692-011 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	6.20	6.06	2	20	

Lab Batch #: 966920

Date Analyzed: 04/24/2015 17:20 **Date Prepared:** 04/24/2015 **Analyst:** WRU

QC- Sample ID: 506692-010 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	7.26	6.85	6	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kit Prichard

Company Name: Etech Environmental

Company Address: PO Box 8469

City/State/Zip: Midland Tx 79708

Telephone No: 432-2200 Fax No: 432-2213

Sampler Signature:

e-mail: Kit@etechenv.com

Project Name: State 20

Project #: 594-16006-00

Project Loc: 50601

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only) ORDER #: 506692

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	No. of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 (8015M) 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.					RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	Sample Point 1	0	12	4.16.15	8:00	1	☒								S	☒							☒								☒
	Sample Point 1	12	24		8:05	1	☒								S	☒							☒								☒
	Sample point 1	24	30		8:07	1	☒								S	☒							☒								☒
	Sample point 2	0	12		9:10	1	☒								S	☒							☒								☒
	Sample point 2	12	24		9:15	1	☒								S	☒							☒								☒
	Sample point 2	24	36		9:17	1	☒								S	☒							☒								☒
	Sample point 2	36	42		9:20	1	☒								S	☒							☒								☒
	Sample point 2	4'	5'		9:22	1	☒								S	☒							☒								☒
	Sample point 2	5'	6'		9:26	1	☒								S	☒							☒								☒
	Sample point 2	6'	7'		9:28	1	☒								S	☒							☒								☒

Special Instructions: Please CC:Britney@etechenv.com

Relinquished by:	Date	Time	Received by:	Date	Time
Britney Beaty	4.23.15			4/24/15	11:18
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 10.5 °C

Final 1.000

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kit Prichard

Company Name: Etech Environmental

Company Address: PO Box 8469

City/State/Zip: Midland Tx 79708

Telephone No: 432-2200 Fax No: 432-2213

Sampler Signature:

e-mail: Kit@etechenv.com

Project Name: State 20

Project #: 384-60106-00

Project Loc: 30901111

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 506692

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	No. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 1005 1006	TOTAL: TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	Sample point 2	7'	8'	4/16/15	8:30	1	☒								S	☒								☒				☒

Special Instructions: Please CC:Britney@etechenv.com

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 10.5 °C

Relinquished by:	Date	Time	Received by:	Date	Time
Britney Beaty	4.23.15			4/24/15	1:18
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 04/24/2015 11:18:00 AM

Work Order #: 506692

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	10.5
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**No**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**N/A**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 04/24/2015

Checklist reviewed by: Julian Martinez Date: 04/24/2015