

3302 122nd Street
Lubbock, Texas 79423
Mailing Address:
P.O. Box 53427
Lubbock, Texas 79453
Phone: 806-771-8033
Fax: 806-687-6926
www.bccccorp.com



APPROVED
By Olivia Yu at 3:14 pm, May 10, 2017

NMOCD approves the corrective action plan for 1RP-4642 with modifications to the remediation process:

1. For the areas surrounding Borehole 1 and 2, excavate to 4 ft. bgs and properly set in minimum 20-mil liner to encapsulate TPH contamination. Confirmation sidewall samples for TPH and chlorides are required.
2. For the area demarcated for Borehole 3, excavate to 4.5 ft, obtain confirmation bottom and sidewall samples for TPH and Chlorides.
3. For the area demarcated for Borehole 4, field sample from surface down to 54 in. bgs to determine the depth of excavation. Submit bottom and sidewall confirmation samples for excavated depth.

Texland Petroleum
Lea YL State #2
Sec. 2-T17S-R37E, Lea Co., NM
Affected Surface Area – 6,110 sq. ft. / .14 acre
GPS Coordinates: N32.86800 W103.22282

OCD Case Number 1RP-4642

3302 122nd Street
Lubbock, Texas 79423
Mailing Address:
P.O. Box 53427
Lubbock, Texas 79453
Phone: 806-771-8033
Fax: 806-687-6926
www.bcccorp.com



May 3, 2017

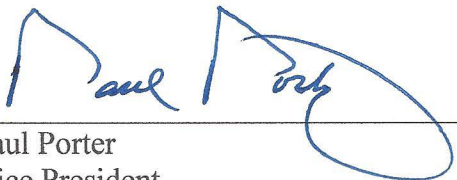
**Texland Petroleum
Lea YL State #2
Sec. 2-T17S-R37E, Lea Co., NM
Affected Surface Area – 6,110 sq. ft. / .14 acre
GPS Coordinates: N32.86800 W103.22282**

OCD Case Number 1RP-4642

Proposed Corrective Action Plan

On March 14, 2017, BCC, Inc. conducted a site assessment of a past oil and produced water release that originated from a ruptured flowline running from Texland Petroleum's Lea YL State #2 well. The affected area is in the pasture located 110 yards southeast of the Lea YL State Tank Battery. All of the affected surface areas were mapped and tracked by GPS with the square footage totaling 6,110 square feet, or .14 acre. The affected soils do not contain any free liquids, but do exhibit gross staining. According to the New Mexico Office of the State Engineer, the average depth to ground water below land surface at this site is 70 feet. The horizontal distance from the nearest fresh water source or surface water body is >1,000 feet. On-site field testing of the soil including both chloride and TPH analysis was performed on April 5, 2017. Split soil samples were laboratory analyzed for confirmation of the field testing results.

Delineation of this site revealed that the chloride contamination throughout the affected areas extended vertically to an average depth of four feet below ground surface. Based on this information, the proposed corrective action plan for this release will consist of excavating the affected areas to 4' bgs and disposing the contaminated soils at an off-site permitted facility. Soil samples will be pulled at the base of the excavation and laboratory analyzed to confirm that the chloride levels are satisfactory before any backfilling occurs. Sidewall samples will also be pulled and laboratory analyzed for TPH, BTEX, and chloride content to confirm that the affected soils have all been removed horizontally. Once the laboratory analysis has been received and the NMOCDC approves of the soil sample results, the excavated areas will be backfilled with clean soil and contoured to provide drainage away from the site. An approved revegetation and noxious weed management plan (attached) will then be implemented to complete the remedial activities for this release.



Paul Porter
Vice President
BCC, Inc.

3302 122nd Street
Lubbock, Texas 79423
Mailing Address:
P.O. Box 53427
Lubbock, Texas 79453
Phone: 806-771-8033
Fax: 806-687-6926
www.bccc corp.com



April 28, 2017

**Revegetation and Noxious Weed Management Plan
for
Texland Petroleum
Lea YL State #2
OCD Case Number 1RP-4642**

Once all of the excavated areas have been backfilled, contoured, and the remediation requirements have been met, Texland Petroleum proposes the following revegetation and noxious weed management plan for OCD Case Number 1RP-4642, the Lea YL State #2 release:

Seed Mix – Certified Weed Free Seed:

Blue Grama	30.00%	1.5 PLS lbs./acre
Sideoats Grama	27.00%	4.5 PLS lbs./acre
WW Spar Bluestem	8.00%	1.8 PLS lbs./acre
Blackwell Switchgrass	8.00%	3.5 PLS lbs./acre
Sel 75 Kleingrass	8.00%	1.5 PLS lbs./acre
Sand Dropseed	6.00%	1.0 PLS lbs./acre
Texoka Buffalograss	6.00%	8.0 PLS lbs./acre
Little Bluestem	5.00%	3.4 PLS lbs./acre
VNS Tall Fescue	<u>2.00%</u>	4.0 PLS lbs./acre
	100.00%	

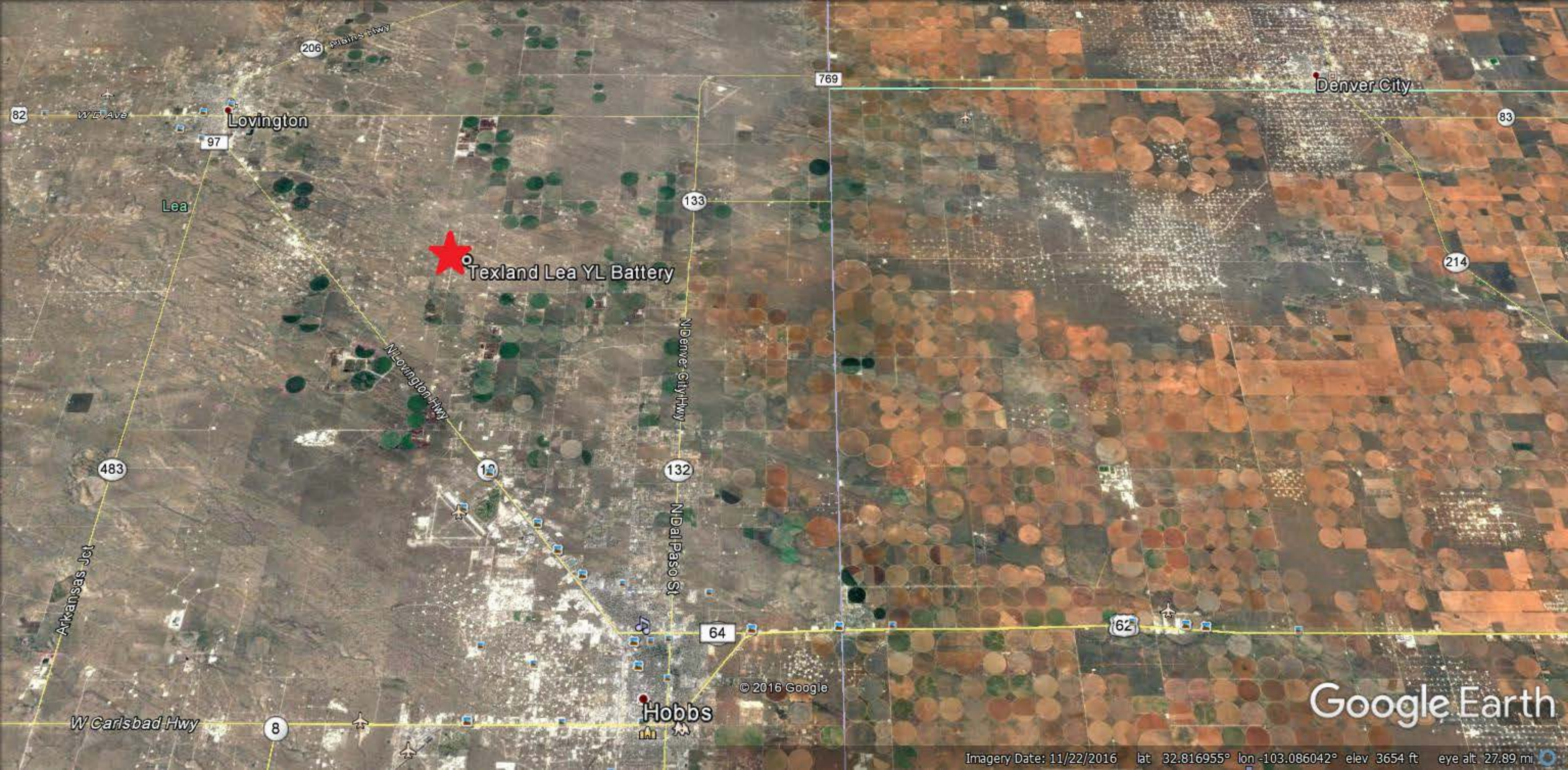
The seeding would be done mechanically with a drill seeder at the rate of 20 lbs./acre as soon as remediation requirements have been met and the plan has been approved by the NMSLO staff (approximate late May timing). After reseeding of the site is complete, continuous monitoring will take place to determine if any more seed needs to be applied, or if there has been any noxious weed invasions. If any noxious weeds were to emerge, chemical treatment would be used to eradicate the problem once the weed species has been identified. Continuous monitoring and any needed follow-up treatments would be maintained until the revegetation of this site is determined to be complete.

3302 122nd Street
Lubbock, Texas 79423
Mailing Address:
P.O. Box 53427
Lubbock, Texas 79453
Phone: 806-771-8033
Fax: 806-687-6926
www.bccc corp.com



Texland Petroleum
Lea YL State #2
Sec. 2-T17S-R37E, Lea Co., NM
Affected Surface Area – 6,110 sq. ft. / .14 acre
GPS Coordinates: N32.86800 W103.22282

OCD Case Number 1RP-4642



Google Earth

Texland Petroleum
Lea YL State #2
Oil & Produced Water Spill
Affected Area - 6,110 sq. ft. / .14 acre
GPS Coordinates: N32.86800
W103.22282



Texland Lea YL Battery

Catchings Rd

© 2016 Google

Google Earth

82

78

W Stiles Rd



1997

Imagery Date: 11/22/2016 lat 32.861546° lon -103.229685° elev 3772 ft eye alt 6749 ft

Texland Petroleum
Lea YL State #2
Oil & Produced Water Spill
Affected Area - 6,110 sq. ft. / .14 acre
GPS Coordinates: N32.86800
W103.22282



Texland Lea YL Battery



© 2016 Google

Google Earth



Google Earth

Imagery Date: 2/1/2017 lat 32.868059° lon -103.223246° elev 3766 ft eye alt 4349 ft

136 ft
1997



Borehole 3

1A

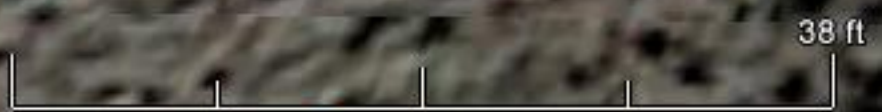
Borehole 1

Borehole 2

Borehole 4

© 2016 Google

Google Earth



1997

Imagery Date: 2/1/2017 lat 32.867823° lon -103.223009° elev 3765 ft eye alt 3914 ft

Texland Petroleum
Lea 'YL' State #2
OCD Case Number 1RP-4642

Sample ID	Depth (in. or ft.)	Field or Lab Test	Benzene (mg/kg)	BTEX (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)	GPS Coordinates
1A	Surface	Lab	<0.00200	0.0234	46,900	69.1	N32.86801 W103.22282
1A-16	16 in.	Lab	<0.00199	0.173	14,299	79.9	N32.86801 W103.22282
Borehole 1	36 in.	Field			35,000	1,988	N32.86801 W103.22271
Borehole 1	54 in.	Field			25,000	156	N32.86801 W103.22271
Borehole 1	72 in.	Field			25,000	85	N32.86801 W103.22271
Borehole 1-6	72 in.	Lab	<0.181	<0.181	21,100	53.2	N32.86801 W103.22271
Borehole 1	120 in.	Field			20,000	25	N32.86801 W103.22271
Borehole 1	156 in.	Field			5,000		N32.86801 W103.22271
Borehole 1	180 in.	Field			750		N32.86801 W103.22271
Borehole 1-15	180 in.	Lab	<0.0185	<0.0185	<25.0	<25.0	N32.86801 W103.22271
Borehole 1	204 in.	Field			Blank		N32.86801 W103.22271
Borehole 2	36 in.	Field			30,000	1,804	N32.86797 W103.22285
Borehole 2	54 in.	Field			20,000	75	N32.86797 W103.22285
Borehole 2	93 in.	Field			20,000	25	N32.86797 W103.22285
Borehole 2	120 in.	Field			600	25	N32.86797 W103.22285
Borehole 2	144 in.	Field			Blank		N32.86797 W103.22285
Borehole 2-15	180 in.	Lab	<0.0185	<0.0185	<25.0	<25.0	N32.86797 W103.22285
Borehole 3	54 in.	Field			7,500	50	N32.86804 W103.22302
Borehole 3-4.5	54 in.	Lab	<0.0850	<0.0850	6,856	27.9	N32.86804 W103.22302
Borehole 3	72 in.	Field			Blank		N32.86804 W103.22302
Borehole 3-15	180 in.	Lab	<0.0195	<0.0195	<25.0	<25.0	N32.86804 W103.22302
Borehole 4	54 in.	Field			Blank	25	N32.86786 W103.22319
Borehole 4-15	180 in.	Lab	<0.0190	<0.0190	<25.0	<25.0	N32.86786 W103.22319

Certificate of Analysis Summary 548698

BCC, Inc.-Lubbock, LUBBOCK, TX

Project Name: Texland Petroleum

Project Id:

Contact: Paul Porter

Project Location: Lea YL State #2 (NM)

Date Received in Lab: Wed Mar-15-17 02:29 pm

Report Date: 23-MAR-17

Project Manager: Liz Givens

Analysis Requested	Lab Id:	548698-001	548698-002				
	Field Id:	Sample 1A-Surface	1A-16				
	Depth:						
	Matrix:	SOIL	SOIL				
	Sampled:	Mar-14-17 15:00	Mar-14-17 15:15				
BTEX by EPA 8021B SUB: T104704534-15-1	Extracted:	Mar-18-17 01:20	Mar-18-17 01:20				
	Analyzed:	Mar-18-17 05:34	Mar-18-17 05:16				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.00200 0.00200	<0.00199 0.00199				
Toluene		<0.00200 0.00200	<0.00199 0.00199				
Ethylbenzene		0.00586 0.00200	0.0438 0.00199				
m,p-Xylenes		0.0123 0.00399	0.0500 0.00398				
o-Xylene		0.00520 0.00200	0.0790 0.00199				
Total Xylenes		0.0175 0.00200	0.129 0.00199				
Total BTEX		0.0234 0.00200	0.173 0.00199				
Chloride by EPA 300	Extracted:	Mar-15-17 16:05	Mar-15-17 16:05				
	Analyzed:	Mar-16-17 13:15	Mar-16-17 13:32				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		69.1 50.0	79.9 50.0				
DRO-ORO By SW8015B	Extracted:	Mar-17-17 16:00	Mar-17-17 16:00				
	Analyzed:	Mar-20-17 23:42	Mar-21-17 00:14				
	Units/RL:	mg/kg RL	mg/kg RL				
Diesel Range Organics (DRO)		31300 E 500	10200 500				
Oil Range Hydrocarbons (ORO)		15600 500	3930 500				
TPH GRO by EPA 8015 Mod.	Extracted:	Mar-16-17 09:30	Mar-16-17 09:30				
	Analyzed:	Mar-17-17 00:30	Mar-17-17 00:03				
	Units/RL:	mg/kg RL	mg/kg RL				
TPH-GRO		<200 200	169 39.5				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Johnny Grindstaff
Lubbock Laboratory Director

Analytical Report 548698

**for
BCC, Inc.-Lubbock**

Project Manager: Paul Porter

Texland Petroleum

23-MAR-17

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

23-MAR-17

Project Manager: **Paul Porter**

BCC, Inc.-Lubbock

3302 122nd St

P.O. Box 53427

LUBBOCK, TX 79453

Reference: XENCO Report No(s): **548698**

Texland Petroleum

Project Address: Lea YL State #2 (NM)

Paul Porter :

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) 548698. 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. 548698 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,

Johnny Grindstaff

Lubbock Laboratory Director

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 548698

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample 1A-Surface	S	03-14-17 15:00		548698-001
1A-16	S	03-14-17 15:15		548698-002

Client Name: BCC, Inc.-Lubbock**Project Name: Texland Petroleum**Project ID:
Work Order Number(s): 548698Report Date: 23-MAR-17
Date Received: 03/15/2017

Sample receipt non conformance and comments:

Sample receipt non conformance and comments per sample:

None

Analytical non conformance and comments:

Batch: LBA-3012841 DRO-ORO By SW8015B

Surrogate Tricosane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 548698-002 S, 548698-002 SD, 548698-001, 548698-002.

Lab Sample ID 548698-002 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Diesel Range Organics (DRO) recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 548698-001, -002.

The Laboratory Control Sample for Diesel Range Organics (DRO) is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3012857 TPH GRO by EPA 8015 Mod.

Sample 548698-001 was diluted due to turbidity and excessive hydrocarbons beyond xylene. MS/MSD failed due to high dilution.

Batch: LBA-3012889 BTEX-MTBE by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 548698

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Sample 1A-Surface**

Matrix: Soil

Date Received: 03.15.17 14.29

Lab Sample Id: 548698-001

Date Collected: 03.14.17 15.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 03.15.17 16.05

Basis: Wet Weight

Seq Number: 3012723

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	69.1	50.0	mg/kg	03.16.17 13.15		2

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: HJP

% Moisture:

Analyst: HJP

Date Prep: 03.17.17 16.00

Basis: Wet Weight

Seq Number: 3012841

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	31300	500	mg/kg	03.20.17 23.42	E	20
Oil Range Hydrocarbons (ORO)	PHCG2835	15600	500	mg/kg	03.20.17 23.42		20

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	40200	%	65-144	03.20.17 23.42	**

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: FOV

% Moisture:

Analyst: FOV

Date Prep: 03.18.17 01.20

Basis: Wet Weight

Seq Number: 3012889

SUB: T104704534-15-1

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.18.17 05.34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.18.17 05.34	U	1
Ethylbenzene	100-41-4	0.00586	0.00200	mg/kg	03.18.17 05.34		1
m,p-Xylenes	179601-23-1	0.0123	0.00399	mg/kg	03.18.17 05.34		1
o-Xylene	95-47-6	0.00520	0.00200	mg/kg	03.18.17 05.34		1
Total Xylenes	1330-20-7	0.0175	0.00200	mg/kg	03.18.17 05.34		1
Total BTEX		0.0234	0.00200	mg/kg	03.18.17 05.34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	80-120	03.18.17 05.34	
1,4-Difluorobenzene	540-36-3	87	%	80-120	03.18.17 05.34	

Certificate of Analytical Results 548698

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Sample 1A-Surface**

Matrix: Soil

Date Received: 03.15.17 14.29

Lab Sample Id: 548698-001

Date Collected: 03.14.17 15.00

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.16.17 09.30

Basis: Wet Weight

Seq Number: 3012857

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<200	200	mg/kg	03.17.17 00.30	U	50
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	76-123	03.17.17 00.30		
a,a,a-Trifluorotoluene	98-08-8	111	%	69-120	03.17.17 00.30		

Certificate of Analytical Results 548698

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **1A-16**
Lab Sample Id: 548698-002

Matrix: Soil
Date Collected: 03.14.17 15.15

Date Received: 03.15.17 14.29

Analytical Method: Chloride by EPA 300

Tech: RNL

Analyst: RNL

Seq Number: 3012723

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Date Prep: 03.15.17 16.05

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	79.9	50.0	mg/kg	03.16.17 13.32		2

Analytical Method: DRO-ORO By SW8015B

Tech: HJP

Analyst: HJP

Seq Number: 3012841

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Date Prep: 03.17.17 16.00

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	10200	500	mg/kg	03.21.17 00.14		20
Oil Range Hydrocarbons (ORO)	PHCG2835	3930	500	mg/kg	03.21.17 00.14		20

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	5960	%	65-144	03.21.17 00.14	**

Analytical Method: BTEX by EPA 8021B

Tech: FOV

Analyst: FOV

Seq Number: 3012889

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

SUB: T104704534-15-1

Date Prep: 03.18.17 01.20

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.18.17 05.16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.18.17 05.16	U	1
Ethylbenzene	100-41-4	0.0438	0.00199	mg/kg	03.18.17 05.16		1
m,p-Xylenes	179601-23-1	0.0500	0.00398	mg/kg	03.18.17 05.16		1
o-Xylene	95-47-6	0.0790	0.00199	mg/kg	03.18.17 05.16		1
Total Xylenes	1330-20-7	0.129	0.00199	mg/kg	03.18.17 05.16		1
Total BTEX		0.173	0.00199	mg/kg	03.18.17 05.16		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	93	%	80-120	03.18.17 05.16	
4-Bromofluorobenzene	460-00-4	115	%	80-120	03.18.17 05.16	

Certificate of Analytical Results 548698

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **1A-16**
Lab Sample Id: 548698-002

Matrix: Soil
Date Collected: 03.14.17 15.15

Date Received: 03.15.17 14.29

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.16.17 09.30

Basis: Wet Weight

Seq Number: 3012857

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	169	39.5	mg/kg	03.17.17 00.03		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	125	%	76-123	03.17.17 00.03	**	
a,a,a-Trifluorotoluene	98-08-8	108	%	69-120	03.17.17 00.03		

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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Atlanta - Midland/Odessa - Tampa/Lakeland - Phoenix - Latin America

4147 Greenbriar Dr, Stafford, TX 77477
 9701 Harry Hines Blvd, Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 1211 W Florida Ave, Midland, TX 79701
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	

BCC, Inc.-Lubbock Texland Petroleum

Analytical Method: Chloride by EPA 300

Seq Number: 3012723

MB Sample Id: 721738-1-BLK

Matrix: Solid

LCS Sample Id: 721738-1-BKS

Prep Method: E300P

Date Prep: 03.15.17

LCSD Sample Id: 721738-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<25.0	250	245	98	249	100	90-110	2	20	mg/kg	03.16.17 10:51	

Analytical Method: Chloride by EPA 300

Seq Number: 3012723

Parent Sample Id: 548551-005

Matrix: Soil

MS Sample Id: 548551-005 S

Prep Method: E300P

Date Prep: 03.15.17

MSD Sample Id: 548551-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2840	250	3330	196	3160	128	80-120	5	20	mg/kg	03.16.17 11:45	X

Analytical Method: Chloride by EPA 300

Seq Number: 3012723

Parent Sample Id: 546702-016

Matrix: Soil

MS Sample Id: 546702-016 S

Prep Method: E300P

Date Prep: 03.15.17

MSD Sample Id: 546702-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1070	250	1310	96	1340	108	80-120	2	20	mg/kg	03.16.17 15:38	

Analytical Method: DRO-ORO By SW8015B

Seq Number: 3012841

MB Sample Id: 721812-1-BLK

Matrix: Solid

LCS Sample Id: 721812-1-BKS

Prep Method: SW8015P

Date Prep: 03.17.17

LCSD Sample Id: 721812-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	<25.0	100	97.8	98	99.4	99	63-139	2	20	mg/kg	03.20.17 22:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Tricosane	90		88		91		65-144	%	03.20.17 22:38

Analytical Method: DRO-ORO By SW8015B

Seq Number: 3012841

Parent Sample Id: 548698-002

Matrix: Soil

MS Sample Id: 548698-002 S

Prep Method: SW8015P

Date Prep: 03.17.17

MSD Sample Id: 548698-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	10200	100	12800	2600	13100	2900	63-139	2	20	mg/kg	03.21.17 00:45	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Tricosane	5370	**	5490	**	65-144	%	03.21.17 00:45

BCC, Inc.-Lubbock
Texland Petroleum

Analytical Method: BTEX by EPA 8021B

Seq Number: 3012889

MB Sample Id: 721846-1-BLK

Matrix: Solid

LCS Sample Id: 721846-1-BKS

Prep Method: SW5030B

Date Prep: 03.18.17

LCSD Sample Id: 721846-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0855	86	0.0902	90	70-130	5	35	mg/kg	03.18.17 01:20	
Toluene	<0.00200	0.100	0.0770	77	0.0812	81	70-130	5	35	mg/kg	03.18.17 01:20	
Ethylbenzene	<0.00200	0.100	0.0814	81	0.0867	87	71-129	6	35	mg/kg	03.18.17 01:20	
m,p-Xylenes	<0.00400	0.200	0.162	81	0.172	86	70-135	6	35	mg/kg	03.18.17 01:20	
o-Xylene	<0.00200	0.100	0.0838	84	0.0895	90	71-133	7	35	mg/kg	03.18.17 01:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		104		104		80-120	%	03.18.17 01:20
4-Bromofluorobenzene	100		103		103		80-120	%	03.18.17 01:20

Analytical Method: BTEX by EPA 8021B

Seq Number: 3012889

Parent Sample Id: 548738-001

Matrix: Soil

MS Sample Id: 548738-001 S

Prep Method: SW5030B

Date Prep: 03.18.17

MSD Sample Id: 548738-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0879	88	0.0877	88	70-130	0	35	mg/kg	03.20.17 15:58	
Toluene	<0.00200	0.100	0.0815	82	0.0802	80	70-130	2	35	mg/kg	03.20.17 15:58	
Ethylbenzene	<0.00200	0.100	0.0873	87	0.0868	87	71-129	1	35	mg/kg	03.20.17 15:58	
m,p-Xylenes	<0.00400	0.200	0.176	88	0.175	88	70-135	1	35	mg/kg	03.20.17 15:58	
o-Xylene	<0.00200	0.100	0.0886	89	0.0905	91	71-133	2	35	mg/kg	03.20.17 15:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		104		80-120	%	03.20.17 15:58
4-Bromofluorobenzene	98		104		80-120	%	03.20.17 15:58

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3012857

MB Sample Id: 721638-1-BLK

Matrix: Solid

LCS Sample Id: 721638-1-BKS

Prep Method: SW5030B

Date Prep: 03.16.17

LCSD Sample Id: 721638-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<4.00	20.0	18.7	94	18.7	94	35-129	0	20	mg/kg	03.16.17 22:17	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	110		118		113		76-123	%	03.16.17 22:17
a,a,a-Trifluorotoluene	116		100		103		69-120	%	03.16.17 22:17

BCC, Inc.-Lubbock Texland Petroleum

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3012857

Parent Sample Id: 548698-001

Matrix: Soil

MS Sample Id: 548698-001 S

Prep Method: SW5030B

Date Prep: 03.16.17

MSD Sample Id: 548698-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<198	990	<198	0	<200	0	35-129	NC	20	mg/kg	03.17.17 00:57	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	101		100		76-123	%	03.17.17 00:57
a,a,a-Trifluorotoluene	111		110		69-120	%	03.17.17 00:57

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Brandon & Clark
3403 Industrial Blvd.
Hobbs, NM 88240
Tel (575) 392-7561
Fax (575) 392-4508

Company Name: **BCC Inc.**Phone #: **806.771.8033**

Fax #:

E-mail: **bcccorp@aol.com**

Address: (Street, City, Zip)

3302. 182nd Lubbock, TX. 79423 806.187.6926

Contact Person: **Paul Porter**

Invoice to:

(If different from above) **P.O. Box 53427 Lubbock TX. 79453**

Project #:

Project Name:

Project Location (including state): **Lea YL State #2 (NM)**Sampler Signature: **Paul Porter**

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE

MTBE 8021 / 602 / 8260 / 624
BTEX 8021 / 602 / 8260 / 624
TPH 418.1 / TX1005 / TX1005 Ext(C35)
TPH 8015 GRO / DRO TVHC
PAH 8270 / 625
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7
TCLP Metals Ag As Ba Cd Cr Pb Se Hg
TCLP Volatiles
TCLP Semi Volatiles
TCLP Pesticides
RCI
GC/MS Vol. 8260 / 624
GC/MS Semi. Vol. 8270 / 625
PCB's 8082 / 608
Pesticides 8081 / 608
BOD, TSS, pH
Moisture Content
Cl⁻, F⁻, SO₄⁻, NO₃⁻, NO₂⁻, PO₄⁻, P, Alkalinity
Na, Ca, Mg, K, TDS, EC

Turn Around Time if different from standard

Hold

**ANALYSIS REQUEST
(Circle or Specify Method No.)**

EPA 308

Relinquished by: **Paul Porter** Company: **BCC, Inc.** Date: **3/15/17**

Received by: _____ Company: _____ Date: _____ Time: _____

INST _____
OBS _____
COR _____LAB USE ONLY
Intact Y / N
Headspace Y / N / NA

REMARKS:

Relinquished by: _____ Company: _____ Date: _____ Time: _____

Received by: _____ Company: _____ Date: _____ Time: _____

INST _____
OBS _____
COR _____LAB USE ONLY
Intact Y / N
Headspace Y / N / NA

REMARKS:

Relinquished by: _____ Company: _____ Date: _____ Time: _____

Received by: _____ Company: _____ Date: _____ Time: _____

INST _____
OBS _____
COR _____LAB USE ONLY
Intact Y / N
Headspace Y / N / NA

REMARKS:

Client: BCC, Inc.-Lubbock

Date/ Time Received: 03/15/2017 02:29:00 PM

Work Order #: 548698

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR3

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	16.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	No
#4 *Custody Seal present on shipping container/ cooler?	No
#5 *Custody Seals intact on shipping container/ cooler?	N/A
#6 Custody Seals intact on sample bottles?	N/A
#7 *Custody Seals Signed and dated?	N/A
#8 *Chain of Custody present?	Yes
#9 Sample instructions complete on Chain of Custody?	Yes
#10 Any missing/extra samples?	No
#11 Chain of Custody signed when relinquished/ received?	Yes
#12 Chain of Custody agrees with sample label(s)?	Yes
#13 Container label(s) legible and intact?	Yes
#14 Sample matrix/ properties agree with Chain of Custody?	Yes
#15 Samples in proper container/ bottle?	Yes
#16 Samples properly preserved?	Yes
#17 Sample container(s) intact?	Yes
#18 Sufficient sample amount for indicated test(s)?	Yes
#19 All samples received within hold time?	Yes
#20 Subcontract of sample(s)?	Yes
#21 VOC samples have zero headspace?	N/A
#22 <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
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A
	Xenco San Antonio

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

Analyst:

PH Device/Lot#:

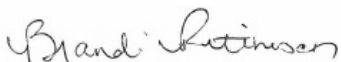
Checklist completed by:



Ashley Derstine

Date: 03/15/2017

Checklist reviewed by:



Brandi Ritcherson

Date: 03/16/2017



Certificate of Analysis Summary 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Project Name: Texland Petroleum

Project Id:

Contact: Paul Porter

Project Location: Lea "YL" Stae #2 (NM)

Date Received in Lab: Thu Apr-20-17 03:20 pm

Report Date: 26-APR-17

Project Manager: Liz Givens

Analysis Requested	Lab Id:	551443-001	551443-002	551443-003	551443-004	551443-005	551443-006
	Field Id:	Borehole 1-6	Borehole 1-15	Borehole 2-15	Borehole 3-4.5	Borehole 3-15	Borehole 4-15
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Apr-06-17 09:15	Apr-06-17 09:30	Apr-06-17 10:00	Apr-06-17 10:30	Apr-06-17 11:00	Apr-06-17 11:30
BTEX by EPA 8021B	Extracted:	Apr-24-17 12:30	Apr-24-17 12:30	Apr-24-17 12:30	Apr-24-17 12:30	Apr-24-17 12:30	Apr-24-17 12:30
	Analyzed:	Apr-25-17 06:39	Apr-25-17 03:59	Apr-25-17 04:26	Apr-25-17 06:12	Apr-25-17 04:52	Apr-25-17 00:52
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.181 0.181	<0.0185 0.0185	<0.0185 0.0185	<0.0850 0.0850	<0.0195 0.0195	<0.0190 0.0190
Toluene		<0.181 0.181	<0.0185 0.0185	<0.0185 0.0185	<0.0850 0.0850	<0.0195 0.0195	<0.0190 0.0190
Ethylbenzene		<0.181 0.181	<0.0185 0.0185	<0.0185 0.0185	<0.0850 0.0850	<0.0195 0.0195	<0.0190 0.0190
m,p-Xylenes		<0.363 0.363	<0.0369 0.0369	<0.0369 0.0369	<0.170 0.170	<0.0389 0.0389	<0.0381 0.0381
o-Xylene		<0.181 0.181	<0.0185 0.0185	<0.0185 0.0185	<0.0850 0.0850	<0.0195 0.0195	<0.0190 0.0190
Total Xylenes		<0.181 0.181	<0.0185 0.0185	<0.0185 0.0185	<0.0850 0.0850	<0.0195 0.0195	<0.0190 0.0190
Total BTEX		<0.181 0.181	<0.0185 0.0185	<0.0185 0.0185	<0.0850 0.0850	<0.0195 0.0195	<0.0190 0.0190
Chloride by EPA 300	Extracted:	Apr-21-17 10:00	Apr-21-17 10:00	Apr-21-17 10:00	Apr-21-17 10:00	Apr-21-17 10:00	Apr-21-17 10:00
	Analyzed:	Apr-21-17 15:02	Apr-21-17 16:13	Apr-21-17 16:31	Apr-21-17 16:49	Apr-21-17 17:25	Apr-21-17 17:43
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		53.2 50	<25.0 25.0	<25.0 25.0	27.9 25.0	<25.0 25.0	<25.0 25.0
DRO-ORO By SW8015B	Extracted:	Apr-24-17 14:39	Apr-24-17 14:39	Apr-24-17 14:39	Apr-24-17 14:39	Apr-24-17 14:39	Apr-24-17 14:39
	Analyzed:	Apr-25-17 05:27	Apr-25-17 06:00	Apr-25-17 06:33	Apr-25-17 07:06	Apr-25-17 07:38	Apr-25-17 08:44
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Diesel Range Organics (DRO)		16300 500	<25.0 25.0	<25.0 25.0	4156 500	<25.0 25.0	<25.0 25.0
Oil Range Hydrocarbons (ORO)		4800 500	<25.0 25.0	<25.0 25.0	2700 500	<25.0 25.0	<25.0 25.0
TPH GRO by EPA 8015 Mod.	Extracted:	Apr-24-17 12:30	Apr-24-17 12:30	Apr-24-17 12:30	Apr-24-17 12:30	Apr-24-17 12:30	Apr-24-17 12:30
	Analyzed:	Apr-25-17 06:39	Apr-25-17 03:59	Apr-25-17 04:26	Apr-25-17 06:12	Apr-25-17 04:52	Apr-25-17 00:52
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
TPH-GRO		<36.3 36.3	<3.69 3.69	<3.69 3.69	<17.0 17.0	<3.89 3.89	<3.81 3.81

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Liz Givens
Project Manager

Analytical Report 551443

**for
BCC, Inc.-Lubbock**

**Project Manager: Paul Porter
Texland Petroleum**

26-APR-17

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



26-APR-17

Project Manager: **Paul Porter**
BCC, Inc.-Lubbock
3302 122nd St
P.O. Box 53427
LUBBOCK, TX 79453

Reference: XENCO Report No(s): **551443**
Texland Petroleum
Project Address: Lea "YL" Stae #2 (NM)

Paul Porter :

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) 551443. 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. 551443 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,

A handwritten signature in black ink, appearing to read 'Liz Givens', is written over a horizontal line.

Liz Givens

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Borehole 1-6	S	04-06-17 09:15		551443-001
Borehole 1-15	S	04-06-17 09:30		551443-002
Borehole 2-15	S	04-06-17 10:00		551443-003
Borehole 3-4.5	S	04-06-17 10:30		551443-004
Borehole 3-15	S	04-06-17 11:00		551443-005
Borehole 4-15	S	04-06-17 11:30		551443-006



CASE NARRATIVE

Client Name: BCC, Inc.-Lubbock

Project Name: Texland Petroleum

Project ID:
Work Order Number(s): 551443

Report Date: 26-APR-17
Date Received: 04/20/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3015586 Chloride by EPA 300

Lab Sample ID 551443-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 551443-001, -002, -003, -004, -005, -006.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Chloride Relative Percent Difference (RPD) between matrix spike and duplicate was above quality control limits.

Samples in the analytical batch are: 551443-001, -002, -003, -004, -005, -006

Batch: LBA-3015770 DRO-ORO By SW8015B

Surrogate Tricosane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 551443-004, 551443-001.

Batch: LBA-3015810 BTEX by EPA 8021B

Samples 551443-001 and 551443-004 were diluted due to hydrocarbons beyond xylene.

Batch: LBA-3015814 TPH GRO by EPA 8015 Mod.

Samples 551443-001 and 551443-004 were diluted due to hydrocarbons beyond xylene.



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 1-6**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-001

Date Collected: 04.06.17 09.15

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture: 0

Analyst: RNL

Date Prep: 04.21.17 10.00

Basis: Dry Weight

Seq Number: 3015586

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	53.2	50	mg/kg	04.21.17 15.19		1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: HJP

% Moisture:

Analyst: HJP

Date Prep: 04.24.17 14.39

Basis: Wet Weight

Seq Number: 3015770

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	16300	500	mg/kg	04.25.17 05.27		20
Oil Range Hydrocarbons (ORO)	PHCG2835	4800	500	mg/kg	04.25.17 05.27		20

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	7090	%	65-144	04.25.17 05.27	**

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015810

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.181	0.181	mg/kg	04.25.17 06.39	U	10
Toluene	108-88-3	<0.181	0.181	mg/kg	04.25.17 06.39	U	10
Ethylbenzene	100-41-4	<0.181	0.181	mg/kg	04.25.17 06.39	U	10
m,p-Xylenes	179601-23-1	<0.363	0.363	mg/kg	04.25.17 06.39	U	10
o-Xylene	95-47-6	<0.181	0.181	mg/kg	04.25.17 06.39	U	10
Total Xylenes	1330-20-7	<0.181	0.181	mg/kg	04.25.17 06.39	U	10
Total BTEX		<0.181	0.181	mg/kg	04.25.17 06.39	U	10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	84	%	68-120	04.25.17 06.39	
a,a,a-Trifluorotoluene	98-08-8	90	%	71-121	04.25.17 06.39	



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 1-6**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-001

Date Collected: 04.06.17 09.15

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015814

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<36.3	36.3	mg/kg	04.25.17 06.39	U	10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	90	%	76-123	04.25.17 06.39		
a,a,a-Trifluorotoluene	98-08-8	102	%	69-120	04.25.17 06.39		



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 1-15**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-002

Date Collected: 04.06.17 09.30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture: 0

Analyst: RNL

Date Prep: 04.21.17 10.00

Basis: Dry Weight

Seq Number: 3015586

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<25.0	25.0	mg/kg	04.21.17 16.13	U	1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: HJP

% Moisture:

Analyst: HJP

Date Prep: 04.24.17 14.39

Basis: Wet Weight

Seq Number: 3015770

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	04.25.17 06.00	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	04.25.17 06.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	130	%	65-144	04.25.17 06.00	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015810

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0185	0.0185	mg/kg	04.25.17 03.59	U	1
Toluene	108-88-3	<0.0185	0.0185	mg/kg	04.25.17 03.59	U	1
Ethylbenzene	100-41-4	<0.0185	0.0185	mg/kg	04.25.17 03.59	U	1
m,p-Xylenes	179601-23-1	<0.0369	0.0369	mg/kg	04.25.17 03.59	U	1
o-Xylene	95-47-6	<0.0185	0.0185	mg/kg	04.25.17 03.59	U	1
Total Xylenes	1330-20-7	<0.0185	0.0185	mg/kg	04.25.17 03.59	U	1
Total BTEX		<0.0185	0.0185	mg/kg	04.25.17 03.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	68-120	04.25.17 03.59	
a,a,a-Trifluorotoluene	98-08-8	100	%	71-121	04.25.17 03.59	



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 1-15**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-002

Date Collected: 04.06.17 09.30

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015814

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.69	3.69	mg/kg	04.25.17 03.59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	76-123	04.25.17 03.59		
a,a,a-Trifluorotoluene	98-08-8	109	%	69-120	04.25.17 03.59		



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 2-15**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-003

Date Collected: 04.06.17 10.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture: 0

Analyst: RNL

Date Prep: 04.21.17 10.00

Basis: Dry Weight

Seq Number: 3015586

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<25.0	25.0	mg/kg	04.21.17 16.31	U	1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: HJP

% Moisture:

Analyst: HJP

Date Prep: 04.24.17 14.39

Basis: Wet Weight

Seq Number: 3015770

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	04.25.17 06.33	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	04.25.17 06.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	121	%	65-144	04.25.17 06.33	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015810

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0185	0.0185	mg/kg	04.25.17 04.26	U	1
Toluene	108-88-3	<0.0185	0.0185	mg/kg	04.25.17 04.26	U	1
Ethylbenzene	100-41-4	<0.0185	0.0185	mg/kg	04.25.17 04.26	U	1
m,p-Xylenes	179601-23-1	<0.0369	0.0369	mg/kg	04.25.17 04.26	U	1
o-Xylene	95-47-6	<0.0185	0.0185	mg/kg	04.25.17 04.26	U	1
Total Xylenes	1330-20-7	<0.0185	0.0185	mg/kg	04.25.17 04.26	U	1
Total BTEX		<0.0185	0.0185	mg/kg	04.25.17 04.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	68-120	04.25.17 04.26	
a,a,a-Trifluorotoluene	98-08-8	102	%	71-121	04.25.17 04.26	



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 2-15**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-003

Date Collected: 04.06.17 10.00

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015814

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.69	3.69	mg/kg	04.25.17 04.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	76-123	04.25.17 04.26		
a,a,a-Trifluorotoluene	98-08-8	108	%	69-120	04.25.17 04.26		



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 3-4.5**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-004

Date Collected: 04.06.17 10.30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture: 0

Analyst: RNL

Date Prep: 04.21.17 10.00

Basis: Dry Weight

Seq Number: 3015586

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27.9	25.0	mg/kg	04.21.17 17.07		1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: HJP

% Moisture:

Analyst: HJP

Date Prep: 04.24.17 14.39

Basis: Wet Weight

Seq Number: 3015770

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	4156	500	mg/kg	04.25.17 07.06		20
Oil Range Hydrocarbons (ORO)	PHCG2835	2700	500	mg/kg	04.25.17 07.06		20

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	3780	%	65-144	04.25.17 07.06	**

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015810

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0850	0.0850	mg/kg	04.25.17 06.12	U	5
Toluene	108-88-3	<0.0850	0.0850	mg/kg	04.25.17 06.12	U	5
Ethylbenzene	100-41-4	<0.0850	0.0850	mg/kg	04.25.17 06.12	U	5
m,p-Xylenes	179601-23-1	<0.170	0.170	mg/kg	04.25.17 06.12	U	5
o-Xylene	95-47-6	<0.0850	0.0850	mg/kg	04.25.17 06.12	U	5
Total Xylenes	1330-20-7	<0.0850	0.0850	mg/kg	04.25.17 06.12	U	5
Total BTEX		<0.0850	0.0850	mg/kg	04.25.17 06.12	U	5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	68-120	04.25.17 06.12	
a,a,a-Trifluorotoluene	98-08-8	92	%	71-121	04.25.17 06.12	



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 3-4.5**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-004

Date Collected: 04.06.17 10.30

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015814

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<17.0	17.0	mg/kg	04.25.17 06.12	U	5
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	76-123	04.25.17 06.12		
a,a,a-Trifluorotoluene	98-08-8	103	%	69-120	04.25.17 06.12		



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 3-15**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-005

Date Collected: 04.06.17 11.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture: 0

Analyst: RNL

Date Prep: 04.21.17 10.00

Basis: Dry Weight

Seq Number: 3015586

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<25.0	25.0	mg/kg	04.21.17 17.25	U	1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: HJP

% Moisture:

Analyst: HJP

Date Prep: 04.24.17 14.39

Basis: Wet Weight

Seq Number: 3015770

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	04.25.17 07.38	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	04.25.17 07.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	131	%	65-144	04.25.17 07.38	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015810

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0195	0.0195	mg/kg	04.25.17 04.52	U	1
Toluene	108-88-3	<0.0195	0.0195	mg/kg	04.25.17 04.52	U	1
Ethylbenzene	100-41-4	<0.0195	0.0195	mg/kg	04.25.17 04.52	U	1
m,p-Xylenes	179601-23-1	<0.0389	0.0389	mg/kg	04.25.17 04.52	U	1
o-Xylene	95-47-6	<0.0195	0.0195	mg/kg	04.25.17 04.52	U	1
Total Xylenes	1330-20-7	<0.0195	0.0195	mg/kg	04.25.17 04.52	U	1
Total BTEX		<0.0195	0.0195	mg/kg	04.25.17 04.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	68-120	04.25.17 04.52	
a,a,a-Trifluorotoluene	98-08-8	103	%	71-121	04.25.17 04.52	



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 3-15**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-005

Date Collected: 04.06.17 11.00

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015814

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.89	3.89	mg/kg	04.25.17 04.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	76-123	04.25.17 04.52		
a,a,a-Trifluorotoluene	98-08-8	110	%	69-120	04.25.17 04.52		



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 4-15**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-006

Date Collected: 04.06.17 11.30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture: 0

Analyst: RNL

Date Prep: 04.21.17 10.00

Basis: Dry Weight

Seq Number: 3015586

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<25.0	25.0	mg/kg	04.21.17 17.43	U	1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: HJP

% Moisture:

Analyst: HJP

Date Prep: 04.24.17 14.39

Basis: Wet Weight

Seq Number: 3015770

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	04.25.17 08.44	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	04.25.17 08.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	122	%	65-144	04.25.17 08.44	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015810

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0190	0.0190	mg/kg	04.25.17 00.52	U	1
Toluene	108-88-3	<0.0190	0.0190	mg/kg	04.25.17 00.52	U	1
Ethylbenzene	100-41-4	<0.0190	0.0190	mg/kg	04.25.17 00.52	U	1
m,p-Xylenes	179601-23-1	<0.0381	0.0381	mg/kg	04.25.17 00.52	U	1
o-Xylene	95-47-6	<0.0190	0.0190	mg/kg	04.25.17 00.52	U	1
Total Xylenes	1330-20-7	<0.0190	0.0190	mg/kg	04.25.17 00.52	U	1
Total BTEX		<0.0190	0.0190	mg/kg	04.25.17 00.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	68-120	04.25.17 00.52	
a,a,a-Trifluorotoluene	98-08-8	101	%	71-121	04.25.17 00.52	



Certificate of Analytical Results 551443

BCC, Inc.-Lubbock, LUBBOCK, TX

Texland Petroleum

Sample Id: **Borehole 4-15**

Matrix: Soil

Date Received: 04.20.17 15.20

Lab Sample Id: 551443-006

Date Collected: 04.06.17 11.30

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 04.24.17 12.30

Basis: Wet Weight

Seq Number: 3015814

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.81	3.81	mg/kg	04.25.17 00.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	76-123	04.25.17 00.52		
a,a,a-Trifluorotoluene	98-08-8	113	%	69-120	04.25.17 00.52		

- 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Atlanta - Midland/Odessa - Tampa/Lakeland - Phoenix - Latin America

4147 Greenbriar Dr, Stafford, TX 77477
 9701 Harry Hines Blvd , Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 1211 W Florida Ave, Midland, TX 79701
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



QC Summary 551443

BCC, Inc.-Lubbock Texland Petroleum

Analytical Method: Chloride by EPA 300

Seq Number: 3015586

MB Sample Id: 723512-1-BLK

Matrix: Solid

LCS Sample Id: 723512-1-BKS

Prep Method: E300P

Date Prep: 04.21.17

LCSD Sample Id: 723512-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<25.0	250	238	95	238	95	90-110	0	20	mg/kg	04.21.17 14:26	

Analytical Method: Chloride by EPA 300

Seq Number: 3015586

Parent Sample Id: 551443-001

Matrix: Soil

MS Sample Id: 551443-001 S

Prep Method: E300P

Date Prep: 04.21.17

MSD Sample Id: 551443-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2580	250	3230	260	4170	636	80-120	25	20	mg/kg	04.21.17 15:37	XF

Analytical Method: DRO-ORO By SW8015B

Seq Number: 3015770

MB Sample Id: 723541-1-BLK

Matrix: Solid

LCS Sample Id: 723541-1-BKS

Prep Method: SW8015P

Date Prep: 04.24.17

LCSD Sample Id: 723541-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	<25.0	100	111	111	114	114	63-139	3	20	mg/kg	04.25.17 04:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Tricosane	81		95		93		65-144	%	04.25.17 04:21

Analytical Method: DRO-ORO By SW8015B

Seq Number: 3015770

Parent Sample Id: 551443-006

Matrix: Soil

MS Sample Id: 551443-006 S

Prep Method: SW8015P

Date Prep: 04.24.17

MSD Sample Id: 551443-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	<25.0	100	103	103	102	102	63-139	1	20	mg/kg	04.25.17 09:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Tricosane	120		119		65-144	%	04.25.17 09:17



QC Summary 551443

BCC, Inc.-Lubbock Texland Petroleum

Analytical Method: BTEX by EPA 8021B

Seq Number: 3015810

MB Sample Id: 723642-1-BLK

Matrix: Solid

LCS Sample Id: 723642-1-BKS

Prep Method: SW5030B

Date Prep: 04.24.17

LCSD Sample Id: 723642-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.114	2.00	1.85	93	1.87	94	55-120	1	20	mg/kg	04.24.17 22:11	
Toluene	<0.0200	2.00	1.82	91	1.84	92	77-120	1	20	mg/kg	04.24.17 22:11	
Ethylbenzene	<0.0200	2.00	1.79	90	1.84	92	77-120	3	20	mg/kg	04.24.17 22:11	
m,p-Xylenes	<0.0400	4.00	3.58	90	3.65	91	78-120	2	20	mg/kg	04.24.17 22:11	
o-Xylene	<0.0200	2.00	1.80	90	1.84	92	78-120	2	20	mg/kg	04.24.17 22:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	97		95		90		68-120	%	04.24.17 22:11
a,a,a-Trifluorotoluene	105		94		95		71-121	%	04.24.17 22:11

Analytical Method: BTEX by EPA 8021B

Seq Number: 3015810

Parent Sample Id: 551443-006

Matrix: Soil

MS Sample Id: 551443-006 S

Prep Method: SW5030B

Date Prep: 04.24.17

MSD Sample Id: 551443-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0199	1.99	1.71	86	1.65	88	54-120	4	25	mg/kg	04.25.17 01:19	
Toluene	<0.0199	1.99	1.82	91	1.77	94	57-120	3	25	mg/kg	04.25.17 01:19	
Ethylbenzene	<0.0199	1.99	1.83	92	1.80	96	58-131	2	25	mg/kg	04.25.17 01:19	
m,p-Xylenes	<0.0398	3.98	3.72	93	3.66	97	62-124	2	25	mg/kg	04.25.17 01:19	
o-Xylene	<0.0199	1.99	1.83	92	1.82	97	62-124	1	25	mg/kg	04.25.17 01:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	92		94		68-120	%	04.25.17 01:19
a,a,a-Trifluorotoluene	100		101		71-121	%	04.25.17 01:19

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3015814

MB Sample Id: 723644-1-BLK

Matrix: Solid

LCS Sample Id: 723644-1-BKS

Prep Method: SW5030B

Date Prep: 04.24.17

LCSD Sample Id: 723644-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<4.00	20.0	16.7	84	16.3	82	35-129	2	20	mg/kg	04.24.17 23:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	104		109		108		76-123	%	04.24.17 23:05
a,a,a-Trifluorotoluene	114		108		99		69-120	%	04.24.17 23:05



QC Summary 551443

BCC, Inc.-Lubbock Texland Petroleum

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3015814

Parent Sample Id: 551443-006

Matrix: Soil

MS Sample Id: 551443-006 S

Prep Method: SW5030B

Date Prep: 04.24.17

MSD Sample Id: 551443-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<3.58	17.9	14.1	79	16.1	84	35-129	13	20	mg/kg	04.25.17 02:12	
Surrogate			MS %Rec	MS Flag		MSD %Rec	MSD Flag	Limits		Units	Analysis Date	
4-Bromofluorobenzene			106			113		76-123		%	04.25.17 02:12	
a,a,a-Trifluorotoluene			100			100		69-120		%	04.25.17 02:12	

Client: BCC, Inc.-Lubbock

Date/ Time Received: 04/20/2017 03:20:00 PM

Work Order #: 551443

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-3

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	10.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seal present on shipping container/ cooler?	N/A
#5 *Custody Seals intact on shipping container/ cooler?	N/A
#6 Custody Seals intact on sample bottles?	N/A
#7 *Custody Seals Signed and dated?	N/A
#8 *Chain of Custody present?	Yes
#9 Sample instructions complete on Chain of Custody?	Yes
#10 Any missing/extra samples?	No
#11 Chain of Custody signed when relinquished/ received?	Yes
#12 Chain of Custody agrees with sample label(s)?	Yes
#13 Container label(s) legible and intact?	Yes
#14 Sample matrix/ properties agree with Chain of Custody?	Yes
#15 Samples in proper container/ bottle?	Yes
#16 Samples properly preserved?	Yes
#17 Sample container(s) intact?	Yes
#18 Sufficient sample amount for indicated test(s)?	Yes
#19 All samples received within hold time?	Yes
#20 Subcontract of sample(s)?	No
#21 VOC samples have zero headspace?	N/A
#22 <2 for all samples preserved with HNO ₃ , HCL, H ₂ SO ₄ ? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	N/A
#23 >10 for all samples preserved with NaAsO ₂ +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:

Brenda Ward
Brenda Ward

Date: 04/21/2017

Checklist reviewed by:

Brandi Ritcherson
Brandi Ritcherson

Date: 04/21/2017

3302 122nd Street
Lubbock, Texas 79423
Mailing Address:
P.O. Box 53427
Lubbock, Texas 79453
Phone: 806-771-8033
Fax: 806-687-6926
www.bccc corp.com



April 28, 2017

**Revegetation and Noxious Weed Management Plan
for
Texland Petroleum
Lea YL State #2
OCD Case Number 1RP-4642**

Once all of the excavated areas have been backfilled, contoured, and the remediation requirements have been met, Texland Petroleum proposes the following revegetation and noxious weed management plan for OCD Case Number 1RP-4642, the Lea YL State #2 release:

Seed Mix – Certified Weed Free Seed:

Blue Grama	30.00%	1.5 PLS lbs./acre
Sideoats Grama	27.00%	4.5 PLS lbs./acre
WW Spar Bluestem	8.00%	1.8 PLS lbs./acre
Blackwell Switchgrass	8.00%	3.5 PLS lbs./acre
Sel 75 Kleingrass	8.00%	1.5 PLS lbs./acre
Sand Dropseed	6.00%	1.0 PLS lbs./acre
Texoka Buffalograss	6.00%	8.0 PLS lbs./acre
Little Bluestem	5.00%	3.4 PLS lbs./acre
VNS Tall Fescue	<u>2.00%</u>	4.0 PLS lbs./acre
	100.00%	

The seeding would be done mechanically with a drill seeder at the rate of 20 lbs./acre as soon as remediation requirements have been met and the plan has been approved by the NMSLO staff (approximate late May timing). After reseeding of the site is complete, continuous monitoring will take place to determine if any more seed needs to be applied, or if there has been any noxious weed invasions. If any noxious weeds were to emerge, chemical treatment would be used to eradicate the problem once the weed species has been identified. Continuous monitoring and any needed follow-up treatments would be maintained until the revegetation of this site is determined to be complete.

From: Groves, Amber
To: [Yu, Olivia, EMNRD](mailto:Yu.Olivia.EMNRD@state.nm.us); bcccorp@aol.com
Cc: [Vickie Smith](mailto:Vickie.Smith@texpetro.com)
Subject: RE: Texland Lea YL - IRP 4642 Delineation and Revegetation Plan
Date: Wednesday, May 3, 2017 7:58:19 AM
Attachments: [image002.png](#)
[image001.png](#)

Good Morning,

The revegetation plan that was included in the delineation report that was submitted will be acceptable. However, it will need to be in the work plan that is submitted for approval.

Thank you,

Amber Groves

Remediation Specialist

Field Operations Division

(575)392-3697

(575)263-3209 cell

New Mexico State Land Office

2827 N. Dal Paso Suite 117

Hobbs, NM 88260

.....
CONFIDENTIALITY NOTICE - This e-mail transmission, including all documents, files, or previous e-mail messages attached hereto, may contain confidential and/or legally privileged information. If you are not the intended recipient, or a person responsible for delivering it to the intended recipient, you are hereby notified that you must not read this transmission and that any disclosure, copying, printing, distribution, or use of any of the information contained in and/or attached to this transmission is STRICTLY PROHIBITED. If you have received this transmission in error, please immediately notify the sender and delete the original transmission and its attachments without reading or saving in any manner. Thank you.

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Wednesday, May 03, 2017 7:47 AM
To: bcccorp@aol.com; Groves, Amber <agroves@slo.state.nm.us>
Cc: Vickie Smith <vsmith@texpetro.com>
Subject: RE: Texland Lea YL - IRP 4642 Delineation and Revegetation Plan

Good morning Mr. Porter:

NMOCD approves the delineation workplan for 1RP-4642 with a couple of conditions. Please confirm.

1. In a short document, please provide a summary of completed activities (search and documentation of groundwater depth, distance to waterbody, sampling methodology, other

details in the Conditions of Approval).

2. Revegetation plan
3. Proposed remediation procedure.

Please let me know if you would like to request a meeting to discuss a remediation plan.

Thanks,
Olivia

From: bcccorp@aol.com [<mailto:bcccorp@aol.com>]

Sent: Friday, April 28, 2017 3:52 PM

To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; agroves@slo.state.nm.us

Subject: Texland Lea YL - IRP 4642 Delineation and Revegetation Plan

Good afternoon Olivia and Amber,

The attached file contains the updated delineation lab and field testing results and the revegetation plan for Texland's Lea 'YL' State #2 release. After your review, I would appreciate your directive on moving forward with the remedial activities for this release.

Thank you!
Paul Porter
BCC, Inc.

Office # 1 800.765.3478
Cell # 806.790.1698

www.bcccorp.com



This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>
