Rose-Coss, Dylan H, EMNRD

From: Raymond Taylor <raymond@loboservicesconsulting.com>
Sent: Friday, February 21, 2020 1:12 PM
To: Rose-Coss, Dylan H, EMNRD
Cc: JR Juarez Jr; kyle.waggoner@whiting.com; Tim Blair; Josue Rodriguez
Subject: [EXT] Update - Whiting Oil and Gas - Carlson Fed A 2 TB - Lea Co, NM - Stockpile Analysis
Attachments: Whiting Oil and Gas - Carlson Fed A 2 TB Stockpiles- Lab Data.pdf; FourthStockpileSampling.pdf

Afternoon Dylan,

We've been working on the stockpiles at the Carlson TB. The 7 stockpiles have been watered and worked with a backhoe on the pad twice and then reseampled on 2/3/20. The lab analysis report and lab data table are attached for your review. We'll be working the stockpiles again next week and resampling following that.

Thank You Sir & Let us know if you have any questions

Raymond Taylor, CSP
President
M: 432-425-3098 | O: 1-800-610-6214
raymond@loboserviceconsulting.com
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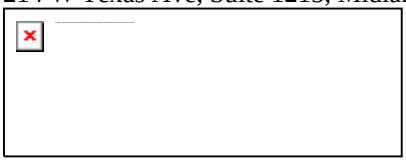
214 W Texas Ave, Suite 1215, Midland, Texas 79701



Certificate of Analysis Summary 651156

Lobo Services, Midland, TX

Project Name: Whiting Oil +Gas Carlson Fed A 2 TB

Project Id:
Contact: Raymond Taylor
Project Location:

Date Received in Lab: Mon Feb-03-20 04:47 pm
Report Date: 06-FEB-20
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	651156-001		651156-002		651156-003		651156-004		651156-005		651156-006	
	Field Id:	Stockpile #1		Stockpile #2		Stockpile #3		Stockpile #4		Stockpile #5		Stockpile #6	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-03-20 00:00		Feb-03-20 00:00		Feb-03-20 00:00		Feb-03-20 00:00		Feb-03-20 00:00		Feb-03-20 00:00	
TPH By SW8015 Mod	***Extracted:***	Feb-04-20 13:00		Feb-04-20 13:00		Feb-04-20 13:00		Feb-04-20 13:00		Feb-04-20 13:00		Feb-04-20 13:00	
	Analyzed:	Feb-04-20 13:23		Feb-04-20 13:42		Feb-04-20 14:01		Feb-04-20 14:20		Feb-04-20 14:39		Feb-04-20 14:58	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.0	50.0	<50.0	50.0	55.8	49.9	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)		2110	49.9	1980	50.0	1390	50.0	3590	49.9	2280	50.0	1870	50.0
Motor Oil Range Hydrocarbons (MRO)		457	49.9	410	50.0	288	50.0	586	49.9	447	50.0	389	50.0
Total TPH		2570	49.9	2390	50.0	1680	50.0	4230	49.9	2730	50.0	2260	50.0

Holly Taylor
Project Manager

Certificate of Analysis Summary 651156

Lobo Services, Midland, TX

Project Name: Whiting Oil +Gas Carlson Fed A 2 TB

Project Id:
Contact: Raymond Taylor
Project Location:

Date Received in Lab: Mon Feb-03-20 04:47 pm
Report Date: 06-FEB-20
Project Manager: Holly Taylor

Analysis Requested								
	Lab Id:	651156-007						
	Field Id:	Stockpile #7						
	Depth:							
	Matrix:	SOIL						
	Sampled:	Feb-03-20 00:00						
TPH By SW8015 Mod	***Extracted:***	Feb-04-20 13:00						
	Analyzed:	Feb-04-20 15:17						
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8					
Diesel Range Organics (DRO)		1390	49.8					
Motor Oil Range Hydrocarbons (MRO)		257	49.8					
Total TPH		1650	49.8					

Holly Taylor
Project Manager

Analytical Report 651156

for

Lobo Services

Project Manager: Raymond Taylor

Whiting Oil +Gas Carlson Fed A 2 TB

06-FEB-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

06-FEB-20

Project Manager: **Raymond Taylor**
Lobo Services
214 W. Texas Ave.
Suite 1215
Midland, TX 79701

Reference: XENCO Report No(s): **651156**
Whiting Oil +Gas Carlson Fed A 2 TB
Project Address:

Raymond Taylor:

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) 651156. 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. 651156 will be filed for 45 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,

Holly Taylor

Holly Taylor
Project Manager

Sample Cross Reference 651156

Lobo Services, Midland, TX

Whiting Oil +Gas Carlson Fed A 2 TB

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Stockpile #1	S	02-03-20 00:00		651156-001
Stockpile #2	S	02-03-20 00:00		651156-002
Stockpile #3	S	02-03-20 00:00		651156-003
Stockpile #4	S	02-03-20 00:00		651156-004
Stockpile #5	S	02-03-20 00:00		651156-005
Stockpile #6	S	02-03-20 00:00		651156-006
Stockpile #7	S	02-03-20 00:00		651156-007

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 651156

Lobo Services, Midland, TX

Whiting Oil +Gas Carlson Fed A 2 TB

Sample Id:	**Stockpile #1**	Matrix:	Soil	Date Received:	02.03.20 16.47
Lab Sample Id:	651156-001	Date Collected:	02.03.20 00.00		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.04.20 13.00	Basis:	Wet Weight
Seq Number:	3115596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.20 13.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	**2110**	49.9	mg/kg	02.04.20 13.23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**457**	49.9	mg/kg	02.04.20 13.23		1
Total TPH	PHC635	**2570**	49.9	mg/kg	02.04.20 13.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-135	02.04.20 13.23	
o-Terphenyl	84-15-1	93	%	70-135	02.04.20 13.23	

Certificate of Analytical Results 651156

Lobo Services, Midland, TX

Whiting Oil +Gas Carlson Fed A 2 TB

Sample Id:	**Stockpile #2**	Matrix:	Soil	Date Received:	02.03.20 16.47
Lab Sample Id:	651156-002	Date Collected:	02.03.20 00.00		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.04.20 13.00	Basis:	Wet Weight
Seq Number:	3115596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.20 13.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1980**	50.0	mg/kg	02.04.20 13.42		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**410**	50.0	mg/kg	02.04.20 13.42		1
Total TPH	PHC635	**2390**	50.0	mg/kg	02.04.20 13.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	02.04.20 13.42	
o-Terphenyl	84-15-1	91	%	70-135	02.04.20 13.42	

Certificate of Analytical Results 651156

Lobo Services, Midland, TX

Whiting Oil +Gas Carlson Fed A 2 TB

Sample Id:	**Stockpile #3**	Matrix:	Soil	Date Received:	02.03.20 16.47
Lab Sample Id:	651156-003	Date Collected:	02.03.20 00.00		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.04.20 13.00	Basis:	Wet Weight
Seq Number:	3115596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.20 14.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1390**	50.0	mg/kg	02.04.20 14.01		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**288**	50.0	mg/kg	02.04.20 14.01		1
Total TPH	PHC635	**1680**	50.0	mg/kg	02.04.20 14.01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	02.04.20 14.01	
o-Terphenyl	84-15-1	93	%	70-135	02.04.20 14.01	

Certificate of Analytical Results 651156

Lobo Services, Midland, TX

Whiting Oil +Gas Carlson Fed A 2 TB

Sample Id:	**Stockpile #4**	Matrix:	Soil	Date Received:	02.03.20 16.47
Lab Sample Id:	651156-004	Date Collected:	02.03.20 00.00		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.04.20 13.00	Basis:	Wet Weight
Seq Number:	3115596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**55.8**	49.9	mg/kg	02.04.20 14.20		1
Diesel Range Organics (DRO)	C10C28DRO	**3590**	49.9	mg/kg	02.04.20 14.20		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**586**	49.9	mg/kg	02.04.20 14.20		1
Total TPH	PHC635	**4230**	49.9	mg/kg	02.04.20 14.20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	02.04.20 14.20	
o-Terphenyl	84-15-1	109	%	70-135	02.04.20 14.20	

Certificate of Analytical Results 651156

Lobo Services, Midland, TX

Whiting Oil +Gas Carlson Fed A 2 TB

Sample Id:	**Stockpile #5**	Matrix:	Soil	Date Received:	02.03.20 16.47
Lab Sample Id:	651156-005	Date Collected:	02.03.20 00.00		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.04.20 13.00	Basis:	Wet Weight
Seq Number:	3115596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.20 14.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	**2280**	50.0	mg/kg	02.04.20 14.39		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**447**	50.0	mg/kg	02.04.20 14.39		1
Total TPH	PHC635	**2730**	50.0	mg/kg	02.04.20 14.39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-135	02.04.20 14.39	
o-Terphenyl	84-15-1	91	%	70-135	02.04.20 14.39	

Certificate of Analytical Results 651156

Lobo Services, Midland, TX

Whiting Oil +Gas Carlson Fed A 2 TB

Sample Id:	**Stockpile #6**	Matrix:	Soil	Date Received:	02.03.20 16.47
Lab Sample Id:	651156-006	Date Collected:	02.03.20 00.00		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.04.20 13.00	Basis:	Wet Weight
Seq Number:	3115596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.20 14.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1870**	50.0	mg/kg	02.04.20 14.58		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**389**	50.0	mg/kg	02.04.20 14.58		1
Total TPH	PHC635	**2260**	50.0	mg/kg	02.04.20 14.58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	02.04.20 14.58	
o-Terphenyl	84-15-1	90	%	70-135	02.04.20 14.58	

Certificate of Analytical Results 651156

Lobo Services, Midland, TX

Whiting Oil +Gas Carlson Fed A 2 TB

Sample Id:	**Stockpile #7**	Matrix:	Soil	Date Received:	02.03.20 16.47
Lab Sample Id:	651156-007	Date Collected:	02.03.20 00.00		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.04.20 13.00	Basis:	Wet Weight
Seq Number:	3115596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.04.20 15.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1390**	49.8	mg/kg	02.04.20 15.17		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**257**	49.8	mg/kg	02.04.20 15.17		1
Total TPH	PHC635	**1650**	49.8	mg/kg	02.04.20 15.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-135	02.04.20 15.17	
o-Terphenyl	84-15-1	88	%	70-135	02.04.20 15.17	

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

QC Summary 651156

Lobo Services

Whiting Oil +Gas Carlson Fed A 2 TB

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P
Seq Number: 3115596 Matrix: Solid Date Prep: 02.04.20
MB Sample Id: 7695964-1-BLK LCS Sample Id: 7695964-1-BKS LCSD Sample Id: 7695964-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	873	87	862	86	70-135	1	20	mg/kg	02.04.20 11:28	
Diesel Range Organics (DRO)	<15.0	1000	952	95	967	97	70-135	2	20	mg/kg	02.04.20 11:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	78		101		103		70-135	%	02.04.20 11:28
o-Terphenyl	79		96		88		70-135	%	02.04.20 11:28

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P
Seq Number: 3115596 Matrix: Solid Date Prep: 02.04.20
MB Sample Id: 7695964-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.04.20 10:51	

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P
Seq Number: 3115596 Matrix: Soil Date Prep: 02.04.20
Parent Sample Id: 651190-002 MS Sample Id: 651190-002 S MSD Sample Id: 651190-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	884	89	999	100	70-135	12	20	mg/kg	02.04.20 12:26	
Diesel Range Organics (DRO)	273	997	1070	80	1120	85	70-135	5	20	mg/kg	02.04.20 12:26	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	100		113		70-135	%	02.04.20 12:26
o-Terphenyl	91		97		70-135	%	02.04.20 12:26

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: ~~605154~~ 605154 BT

www.xenco.com Page 1 of 1

Project Manager:	Raymond Taylor	Bill to: (if different)	JR Juarez
Company Name:	Lobo Services	Company Name:	Whiting Oil and Gas
Address:	214 W Texas Ave, Suite 1215	Address:	
City, State ZIP:	Midland, Texas 79701	City, State ZIP:	
Phone:	432-425-3098	Email:	raymond@loboservicesconsulting.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	whiting Oil + Gas
Project Number:	Carlson Fed A 2 TB
P.O. Number:	
Sampler's Name:	Josue Rodriguez

Turn Around
Routine ☐
Rush: 3 day
Due Date:

SAMPLE RECEIPT

Temp Blank:	Yes ~~No~~	Wet Ice:	Yes No
Temperature (°C):	3.6	Thermometer ID	
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No ~~N/A~~	Correction Factor:	0
Sample Custody Seals:	Yes No ~~N/A~~	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX	TPH 8015	Chlorides
Stockpile #1	Soil	2/3/2020			1		✓	
Stockpile #2	↓	↓			1		✓	
Stockpile #3					1		✓	
Stockpile #4					1		✓	
Stockpile #5					1		✓	
Stockpile #6					1		✓	
Stockpile #7	↓	↓			1		✓	

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		2/3/20	2		
3			4		
5		1647	6		

Revised Date 051418 Rev. 2018.1

Final 1.000

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Lobo Services

Date/ Time Received: 02/03/2020 04:47:00 PM

Work Order #: 651156

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.6
#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 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst:

PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 02/03/2020

Brianna Teel

Checklist reviewed by: Holly Taylor Date: 02/06/2020

Holly Taylor

WHITING OIL AND GAS – CARLSON FED A 2 TB				
NMOCD Closure Criteria 51’ – 100’				
Chloride 10,000 mg/kg	Total TPH 2,500 mg/kg	GRO+DRO 1,000 mg/kg	BTEX 50 mg/kg	Benzene 10 mg/kg

Sample ID	Sample Date	Total TPH mg/kg	GRO+DRO mg/kg	BTEX mg/kg	Benzene mg/kg
Stockpile # 1	7/19/2019	7560.0	7081.0	11.70	0.0456
Stockpile # 2	7/19/2019	6520.0	6071.0	6.84	0.0550
Stockpile # 3	7/19/2019	7240.0	6785.0	15.10	0.0636
Stockpile # 4	7/19/2019	8110.0	7598.0	23.90	0.0918
Stockpile # 5	7/19/2019	8330.0	7788.0	20.20	0.0978
Stockpile # 6	7/19/2019	7260.0	6808.0	14.30	0.0532
Stockpile # 7	7/19/2019	6240.0	5850.0	18.50	0.0806
Stockpile # 1	10/2/2019	1750.0	1659.9		
Stockpile # 2	10/2/2019	1990.0	1879.9		
Stockpile # 3	10/2/2019	4010.0	3655.0		
Stockpile # 4	10/2/2019	5210.0	4785.4		
Stockpile # 5	10/2/2019	5000.0	4593.0		
Stockpile # 6	10/2/2019	2450.0	2240.5		
Stockpile # 7	10/2/2019	3150.0	2896.9		
Stockpile # 1	10/30/2019	2990.0	2660.0		
Stockpile # 2	10/30/2019	2400.0	2160.0		
Stockpile # 3	10/30/2019	2360.0	2119.9		
Stockpile # 4	10/30/2019	3580.0	3151.4		
Stockpile # 5	10/30/2019	3410.0	3046.7		
Stockpile # 6	10/30/2019	3070.0	2745.9		
Stockpile # 7	10/30/2019.	3080.0	2764.3		
Stockpile # 1	2/3/2020	2570.0	2159.9		
Stockpile # 2	2/3/2020	2390.0	2030.0		
Stockpile # 3	2/3/2020	1680.0	1440.0		
Stockpile # 4	2/3/2020	4230.0	3645.8		
Stockpile # 5	2/3/2020	2730.0	2330.0		
Stockpile # 6	2/3/2020	2260.0	1920.0		
Stockpile # 7	2/3/2020	1650.0	1439.8		