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Remediation and Closure Report

Corazon State Unit #5H
API # 30-025-40947 *1RP-5474
Talon Project #700778.119.01

Prepared For:

COG Operating, LLC
600 West Illinois Avenue
Midland TX, 79701

Prepared By:

TALON/LPE
408 W. Texas Avenue
Artesia, New Mexico 88210

June 27, 2019

Dylan Rose-Coss
NMOCD
1220 South St. Francis Drive
Santa Fe, NM 87505

Subject: **Remediation and Closure Report**
Corazon State Unit #5H
API # 30-025-40947 *1RP-5474

Dear Mr. Rose-Coss,

COG Operating, LLC (COG) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above-referenced location. The incident description, soil sampling results, remediation activities, and closure request are presented herein.

Site Information

The Corazon St 5H is located approximately thirty (30) miles southwest of Hobbs, New Mexico. The legal location for this release is Unit Letter M, Section 3, Township 21 South and Range 33 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.50085 North and - 103.56786 West. A site plan is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Kimbrough Land complex with 0 to 3 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Upper Permian in age and is comprised of loamy eolian deposits derived from sedimentary rock. Drainage courses in this area are well dry.

Ground Water and Site Ranking

The New Mexico State Engineer Data Base indicates that the average depth to groundwater in the project vicinity to be greater than 100-feet below ground surface (BGS). See [Appendix II](#) for the referenced groundwater data.

NMOCD Recommended Remedial Action Levels (RRAL's) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, 2500 mg/kg for Total TPH, and Total Chlorides is 20,000 mg/kg.

This location is in an area of low Karst as well as being in a no flood zone. See [Appendix II](#) for FEMA Flood Map and Karst Map.

Incident Description

On March 30, 2019, a release occurred from a hole in the flowline. The release impacted only the well pad with a total of 2.5 barrels of produced water and 2.5 barrels oil. A vacuum truck was called in and a total of 2 barrels of produced water and 2 barrels of oil was recovered. A site map is presented in [Appendix I](#). The initial C-141 is attached in [Appendix II](#).

On May 6, 2019, Talon mobilized personnel and equipment to the site to begin assessment and remediation activities. The impacted area was excavated utilizing a backhoe. Confirmation samples were collected from the bottom and sidewalls of the excavation to ensure that all environmental impacts had been addressed.

See [Appendix V](#) for the complete report of laboratory results.

5-6-19 Soil Sampling Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
NMOCD RRAL's for Site Rankings 0			50 mg/kg	10 mg/kg	DRO + GRO combined = 1000 mg/kg			2500 mg/kg	20,000 mg/kg
S-1	5/6/2019	0	3.7	0.05	58.4	2390	727	3175.4	5840
S-2	5/6/2019	0	0.417	0.05	0	34.8	0	34.8	24800
S-3	5/6/2019	0	0.521	0.05	0	25.6	0	25.6	24800
S-4	5/6/2019	0	29.2	0.2	908	8480	1330	10718	6160
S-5	5/6/2019	0	13.9	0.05	384	5230	927	6541	4480
S-6	5/6/2019	0	114	0.2	2990	23200	3950	30140	64
S-7	5/6/2019	0	82.8	0.2	2100	23500	4520	30120	752

5-9-19 Soil Sampling Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
NMOCD RRAL's for Site Rankings 0			50 mg/kg	10 mg/kg	DRO + GRO combined = 1000 mg/kg			2500 mg/kg	20,000 mg/kg
S-1	5/9/2019	0.5	0.449	0	240	1750	132	2122	204
S-2	5/9/2019	0.5	0	0	0	47.2	8.14	55.3	880
S-5	5/9/2019	0.5	27.5	0.105	1730	8790	839	11359	7450
S-6	5/9/2019	0.5	0.312	0	476	3930	272	4678	3870
SW-8	5/9/2019	0.5	1.78	0	653	10400	1150	12203	2750
SW-9	5/9/2019	0.5	0	0	0	81.9	17.8	99.7	3490
SW-10	5/9/2019	0.5	0	0	13.3	2050	192	2255.3	4860
SW-11	5/9/2019	0.5	0.424	0	606	7260	738	8604	76
SW-12	5/9/2019	0.5	0	0	221	4980	290	5491	4570

5-21-19 Soil Sampling Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg
NMOCD RRAL's for Site Rankings 0			50 mg/kg	10 mg/kg	DRO + GRO combined = 1000 mg/kg			2500 mg/kg
S-1 A	5/21/2019	1	0.3	0.05	0	2210	601	2811
S-5 A	5/21/2019	1	45.1	0.2	1490	10500	2030	14020
S-6 A	5/21/2019	1	0.3	0.05	0	493	118	611
S-7 A	5/21/2019	1	0.3	0.05	0	364	83.1	447.1
S-8 A	5/21/2019	1	0.3	0.05	0	52.1	0	52.1
S-11 A	5/21/2019	1	0.866	0.05	31	1570	457	2058
S-12 A	5/21/2019	1	0.3	0.05	0	19.1	0	19.1

5-29-19 Soil Sampling Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg
NMOCD RRAL's for Site Rankings 0			50 mg/kg	10 mg/kg	DRO + GRO combined = 1000 mg/kg			2500 mg/kg
S-1 B	5/29/2019	2	ND	ND	ND	ND	ND	ND
S-5 B	5/29/2019	2	ND	ND	ND	ND	ND	ND
S-11 B	5/29/2019	2	ND	ND	ND	ND	ND	ND

ND-Analyte Not Detected

Remedial Actions Taken:

- The impacted area in the vicinity of S-1, S-4, and S-5 was excavated to a depth of 2.0-feet BGS with confirmation samples obtained.
- The impacted areas in the vicinity of S-2 and S-3 were excavated to a depth of 0.5-foot BGS with confirmation bottom and sidewall samples obtained to ensure the contamination had been removed.
- The impacted areas in the vicinity of S-6 and S-7 was excavated to a depth of 1.0-foot BGS with confirmation samples obtained.
- All contaminated soil was transported to Lea Land, LLC and R360, both are NMOCD approved soil waste disposal facilities.
- The excavated area was backfilled with clean caliche, machine compacted and contoured to match the surrounding location.
- A Final C-141 is attached in [Appendix IV](#)

Closure

On behalf of COG, we respectfully request that no further actions be required at this site and that closure with regard to this incident be granted.

If we can provide additional information or be of further assistance, please contact our office at (575)-746-8768.

Respectfully submitted,
TALON/LPE



Chris Jones
Project Manager



David J. Adkins
District Manager

Attachments:

- Appendix I Site Plan
- Appendix II Initial C-141, Groundwater Data, FEMA Flood Zone, Soil Survey
- Appendix III Photographic Documentation
- Appendix IV Final C-141
- Appendix V Laboratory Results



APPENDIX I

SITE PLAN

Corazon St Unit #5H

COG Operating, LLC
API-30-25-40947
1RP-5474
Lea County, NM

Legend



Excavated Area



Samples

Corazone St 5H

Google Earth

© 2013 Google

40 ft





APPENDIX II

INITIAL C-141

GROUNDWATER DATA

FEMA FLOOD ZONE

SOIL SURVEY

KARST MAP

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	COG Operating, LLC	OGRID	229137
Contact Name	Jennifer Knowlton	Contact Telephone	(575) 748-1570
Contact email	JKnowlton@concho.com	Incident # (assigned by OCD)	
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.50085 Longitude -103.56786
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Corazon State Unit #005H	Site Type	Flowline
Date Release Discovered	March 30, 2019	API# (if applicable)	30-025-40947

Unit Letter	Section	Township	Range	County
M	03	21S	33E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 2.5	Volume Recovered (bbls) 2
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 2.5	Volume Recovered (bbls) 2
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The release was caused by a hole in the flowline. The flowline is being repaired.
The release was on location. A vacuum truck was dispatched to remove all freestanding fluids.
Concho will evaluate the site to determine if we may commence remediation immediately or delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.


State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? 	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>DeAnn Grant</u> Title: <u>HSE Administrative Assistant</u> Signature: <u></u> Date: <u>4/1/2019</u> email: <u>agrant@concho.com</u> Telephone: <u>(432) 253-4513</u>
<u>OCD Only</u> Received by: _____ Date: _____



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tw	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
CP 00801 POD1		CP	LE	3	2	1	11	21S	33E	636555	3596549*	2038	200		
CP 00578		CP	LE		4	3	11	21S	33E	636674	3595445*	2555	165	150	15
CP 01317 POD1		CP	LE	1	3	2	02	21S	33E	636884	3598450	2839	1250	1025	225
CP 00797 POD1		CP	LE	1	2	4	02	21S	33E	637348	3597564*	2898	110		

Average Depth to Water: 587 feet

Minimum Depth: 150 feet

Maximum Depth: 1025 feet

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 634538.683

Northing (Y): 3596849.656

Radius: 3000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

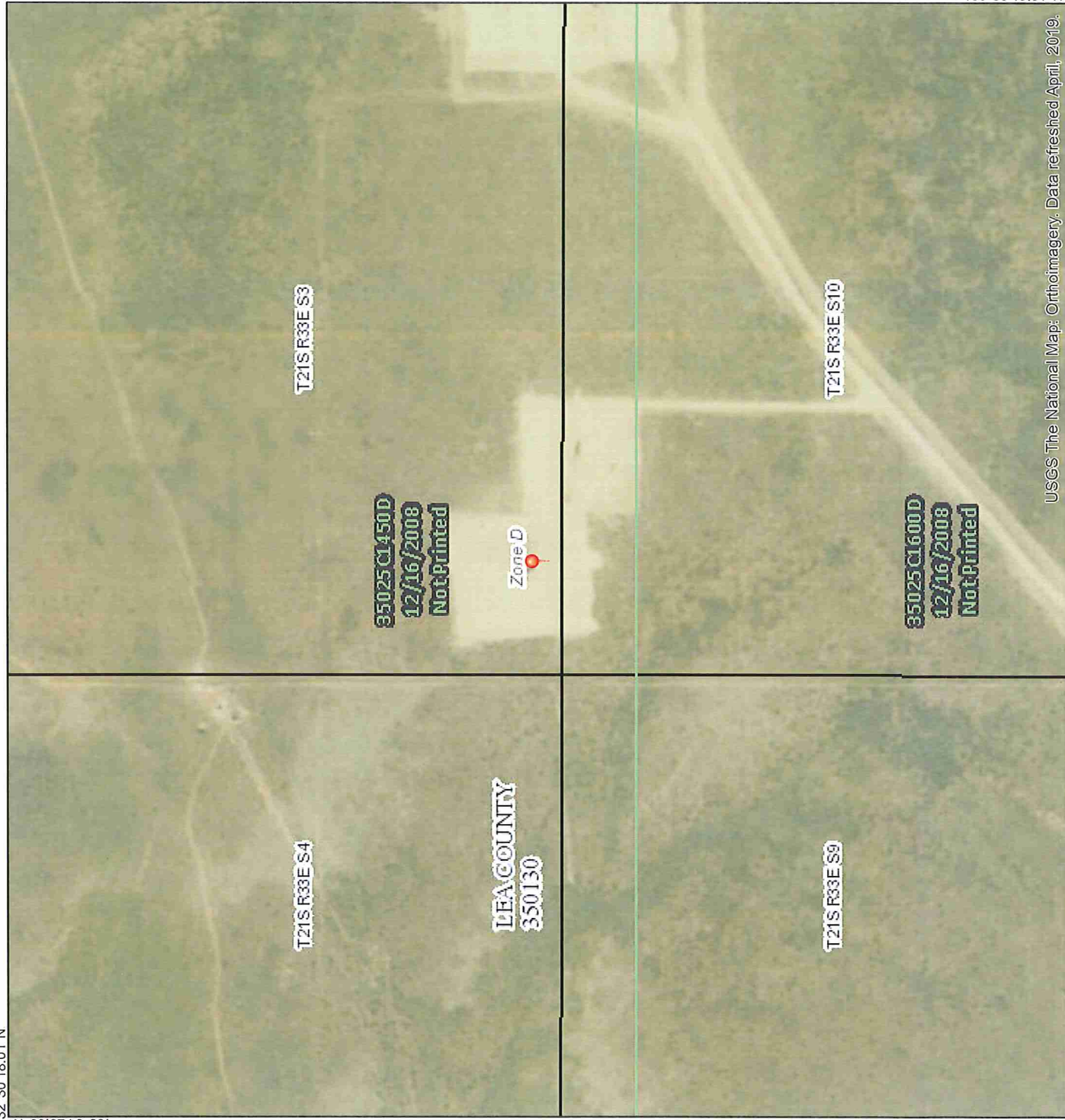
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WATER COLUMN/ AVERAGE DEPTH TO WATER

National Flood Hazard Layer FIRMette



32°30'18.01"N



USGS The National Map: Orthoimagery. Data refreshed April, 2019.



32°29'47.67"N

103°33'45.61"W

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone X)
- Future Conditions 1% Annual Chance Flood Hazard (Zone X)
- Area with Reduced Flood Risk due to Levee. See Notes, Zone X
- Area with Flood Risk due to Levee (Zone D)

OTHER AREAS

- Area of Minimal Flood Hazard (Zone X)
- Effective LOMRs
- Area of Undetermined Flood Hazard (Zone X)

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/29/2019 at 3:21:11 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Lea County, New Mexico

KO—Kimbrough gravelly loam, dry, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tw43

Elevation: 2,500 to 4,800 feet

Mean annual precipitation: 14 to 16 inches

Mean annual air temperature: 57 to 63 degrees F

Frost-free period: 180 to 220 days

Farmland classification: Not prime farmland

Map Unit Composition

Kimbrough, dry, and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimbrough, Dry

Setting

Landform: Playa rims, plains

Down-slope shape: Linear, convex

Across-slope shape: Linear, concave

Parent material: Loamy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 3 inches: gravelly loam

Bw - 3 to 10 inches: loam

Bkkm1 - 10 to 16 inches: cemented material

Bkkm2 - 16 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 4 to 18 inches to petrocalcic

Natural drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 95 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 1.0

Available water storage in profile: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D
Ecological site: Very Shallow 12-17" PZ (R077DY049TX)
Hydric soil rating: No

Minor Components

Eunice

Percent of map unit: 10 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: Very Shallow 12-17" PZ (R077DY049TX)
Hydric soil rating: No

Spraberry

Percent of map unit: 6 percent
Landform: Playa rims, plains
Down-slope shape: Linear, convex
Across-slope shape: Linear
Ecological site: Very Shallow 12-17" PZ (R077DY049TX)
Hydric soil rating: No

Kenhill

Percent of map unit: 4 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Clay Loam 12-17" PZ (R077DY038TX)
Hydric soil rating: No

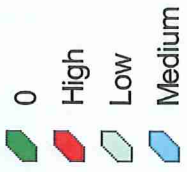
Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 15, Sep 12, 2018

Corazon St Unit #5H

COG Operating, LLC
API-30-025-40947
1RP-5474
Lea County, NM
Karst Map

Legend



Google Earth

© 2013 Google
Image Landsat / Copernicus

20 mi



Corazone St 5H
S-6 S-6

Carlsbad

Loving



APPENDIX III

FINAL C-141

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>150</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Chris Jones

Title: Project Manager

Signature: _____

Date: 6-27-19

email: cjones@talonlpe.com

Telephone: 575-746-8768

OCD Only

Received by: _____

Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

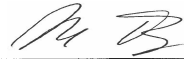
Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Ike Tavarez

Title: Senior HSE Supervisor

Signature: 

Date: 6/28/2019

email: itavarez@concho.com

Telephone: (432) 685-2573

OCD Only

Received by: _____

Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____

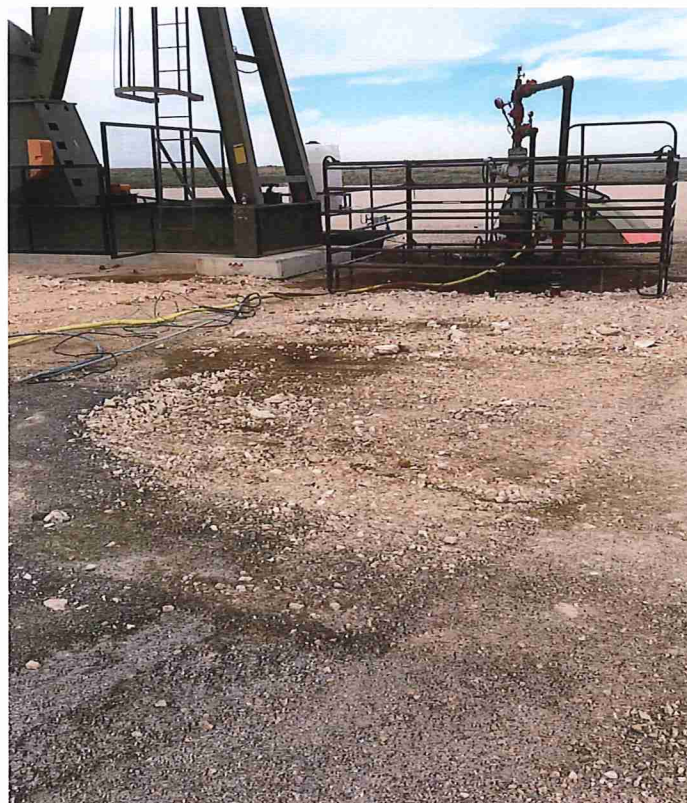
Title: _____



APPENDIX IV

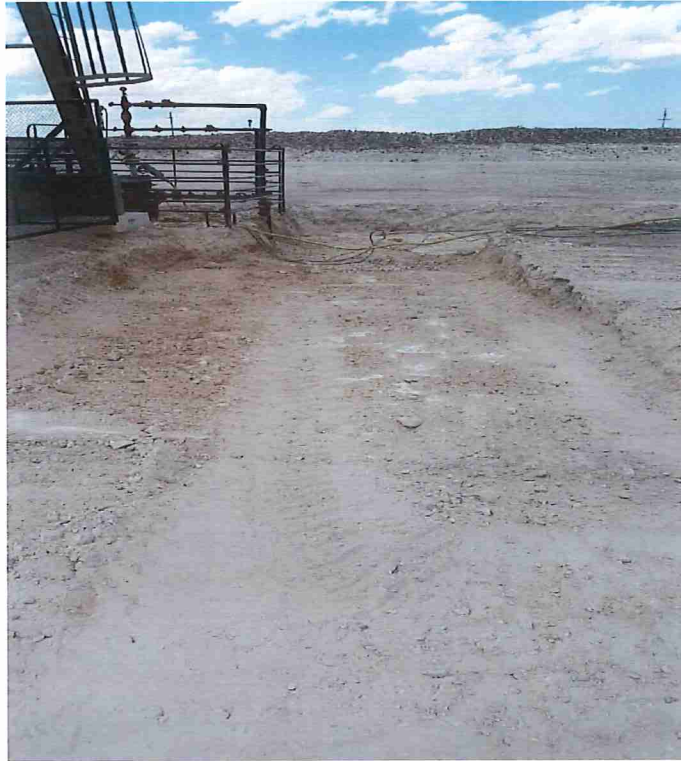
PHOTOGRAPHIC DOCUMENTATION

Spill Event





Excavation





Completed







APPENDIX V

LABORATORY DATA



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

May 08, 2019

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: CORAZON ST UNIT #5H

Enclosed are the results of analyses for samples received by the laboratory on 05/07/19 16:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	05/07/2019	Sampling Date:	05/06/2019
Reported:	05/08/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-1 0' (H901647-01)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/07/2019	ND	2.01	101	2.00	0.392	
Toluene*	0.182	0.050	05/07/2019	ND	2.11	105	2.00	1.27	
Ethylbenzene*	0.443	0.050	05/07/2019	ND	2.01	101	2.00	0.850	
Total Xylenes*	3.08	0.150	05/07/2019	ND	6.10	102	6.00	0.729	
Total BTX	3.70	0.300	05/07/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 112 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5840	16.0	05/08/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	58.4	10.0	05/07/2019	ND	221	110	200	1.40	
DRO >C10-C28*	2390	10.0	05/07/2019	ND	227	114	200	1.18	QM-07
EXT DRO >C28-C36	727	10.0	05/07/2019	ND					

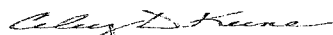
Surrogate: 1-Chlorooctane 98.2 % 41-142

Surrogate: 1-Chlorooctadecane 142 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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 CHRIS JONES
 408 W. TEXAS AVE.
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 Fax To: (575) 745-8905

Received:	05/07/2019	Sampling Date:	05/06/2019
Reported:	05/08/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-2 0' (H901647-02)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/07/2019	ND	2.01	101	2.00	0.392	
Toluene*	<0.050	0.050	05/07/2019	ND	2.11	105	2.00	1.27	
Ethylbenzene*	0.053	0.050	05/07/2019	ND	2.01	101	2.00	0.850	
Total Xylenes*	0.364	0.150	05/07/2019	ND	6.10	102	6.00	0.729	
Total BTX	0.417	0.300	05/07/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 106 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	24800	16.0	05/08/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/08/2019	ND	221	110	200	1.40	
DRO >C10-C28*	34.8	10.0	05/08/2019	ND	227	114	200	1.18	
EXT DRO >C28-C36	<10.0	10.0	05/08/2019	ND					

Surrogate: 1-Chlorooctane 84.3 % 41-142

Surrogate: 1-Chlorooctadecane 88.7 % 37.6-147

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* = Accredited Analyte

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Fax To: (575) 745-8905

Received:	05/07/2019	Sampling Date:	05/06/2019
Reported:	05/08/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-3 0' (H901647-03)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/08/2019	ND	2.01	101	2.00	0.392	
Toluene*	<0.050	0.050	05/08/2019	ND	2.11	105	2.00	1.27	
Ethylbenzene*	0.081	0.050	05/08/2019	ND	2.01	101	2.00	0.850	
Total Xylenes*	0.440	0.150	05/08/2019	ND	6.10	102	6.00	0.729	
Total BTX	0.521	0.300	05/08/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 111 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	24800	16.0	05/08/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/07/2019	ND	221	110	200	1.40	
DRO >C10-C28*	25.6	10.0	05/07/2019	ND	227	114	200	1.18	
EXT DRO >C28-C36	<10.0	10.0	05/07/2019	ND					

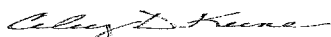
Surrogate: 1-Chlorooctane 90.2 % 41-142

Surrogate: 1-Chlorooctadecane 95.4 % 37.6-147

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 Fax To: (575) 745-8905

Received:	05/07/2019	Sampling Date:	05/06/2019
Reported:	05/08/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-4 0' (H901647-04)

BTX 8021B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	05/08/2019	ND	2.01	101	2.00	0.392	
Toluene*	0.842	0.200	05/08/2019	ND	2.11	105	2.00	1.27	
Ethylbenzene*	4.35	0.200	05/08/2019	ND	2.01	101	2.00	0.850	
Total Xylenes*	24.0	0.600	05/08/2019	ND	6.10	102	6.00	0.729	
Total BTX	29.2	1.20	05/08/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 147 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6160	16.0	05/08/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	908	10.0	05/07/2019	ND	221	110	200	1.40	
DRO >C10-C28*	8480	10.0	05/07/2019	ND	227	114	200	1.18	
EXT DRO >C28-C36	1330	10.0	05/07/2019	ND					

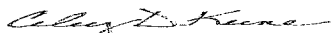
Surrogate: 1-Chlorooctane 161 % 41-142

Surrogate: 1-Chlorooctadecane 256 % 37.6-147

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Received:	05/07/2019	Sampling Date:	05/06/2019
Reported:	05/08/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-5 0' (H901647-05)

BTEx 8021B		mg/kg	Analyzed By: ms					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/08/2019	ND	2.01	101	2.00	0.392	
Toluene*	0.636	0.050	05/08/2019	ND	2.11	105	2.00	1.27	
Ethylbenzene*	1.92	0.050	05/08/2019	ND	2.01	101	2.00	0.850	
Total Xylenes*	11.3	0.150	05/08/2019	ND	6.10	102	6.00	0.729	
Total BTEx	13.9	0.300	05/08/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 159 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4480	16.0	05/08/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	384	10.0	05/07/2019	ND	221	110	200	1.40	
DRO >C10-C28*	5230	10.0	05/07/2019	ND	227	114	200	1.18	
EXT DRO >C28-C36	927	10.0	05/07/2019	ND					

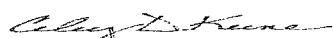
Surrogate: 1-Chlorooctane 121 % 41-142

Surrogate: 1-Chlorooctadecane 191 % 37.6-147

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Received:	05/07/2019	Sampling Date:	05/06/2019
Reported:	05/08/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-6 0' (H901647-06)

BTX 8021B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	05/08/2019	ND	2.01	101	2.00	0.392	
Toluene*	6.70	0.200	05/08/2019	ND	2.11	105	2.00	1.27	
Ethylbenzene*	15.8	0.200	05/08/2019	ND	2.01	101	2.00	0.850	
Total Xylenes*	91.4	0.600	05/08/2019	ND	6.10	102	6.00	0.729	
Total BTX	114	1.20	05/08/2019	ND					

Surrogate: 4-Bromofluorobenzene (PII) 186 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	05/08/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	2990	50.0	05/07/2019	ND	221	110	200	1.40	
DRO >C10-C28*	23200	50.0	05/07/2019	ND	227	114	200	1.18	
EXT DRO >C28-C36	3950	50.0	05/07/2019	ND					

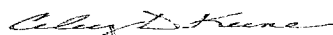
Surrogate: 1-Chlorooctane 259 % 41-142

Surrogate: 1-Chlorooctadecane 537 % 37.6-147

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CHRIS JONES
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Fax To: (575) 745-8905

Received:	05/07/2019	Sampling Date:	05/06/2019
Reported:	05/08/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-7 0' (H901647-07)

BTX 8021B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	05/08/2019	ND	2.01	101	2.00	0.392	
Toluene*	8.13	0.200	05/08/2019	ND	2.11	105	2.00	1.27	
Ethylbenzene*	10.9	0.200	05/08/2019	ND	2.01	101	2.00	0.850	
Total Xylenes*	63.8	0.600	05/08/2019	ND	6.10	102	6.00	0.729	
Total BTX	82.8	1.20	05/08/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 166 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	05/08/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	2100	50.0	05/07/2019	ND	221	110	200	1.40	
DRO >C10-C28*	23500	50.0	05/07/2019	ND	227	114	200	1.18	
EXT DRO >C28-C36	4520	50.0	05/07/2019	ND					

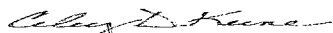
Surrogate: 1-Chlorooctane 218 % 41-142

Surrogate: 1-Chlorooctadecane 593 % 37.6-147

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

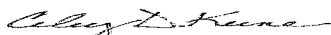
Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

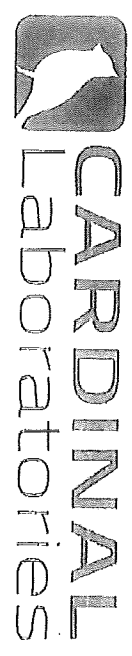
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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Maryland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: TALON LPE		P.O. #: 700778.119.01	
Project Manager: CHRIS JONES		Company: TALON LPE	
Address: 408 W. TEXAS AVE		Attn: C. JONES	
City: ARTESIA		Address:	
Phone #: 575-631-6577		City:	
Fax #: 575-631-6577		State:	
Project #: 700778.119.01		Zip:	
Project Name: CORAZON ST UNIT # 5H		Project Owner: COG	
Project Location: LEA COUNTY		Phone #:	
Sampler Name: MICHAEL COLLIER		Fax #:	
FOR LAB USE ONLY		ANALYSIS REQUEST	
Lab I.D.	Sample I.D.		
HP01647	1ST ↑		
1	5-1 0' TPH	(G)RAB OR (C)OMP.	
2	5-2 0' CL	# CONTAINERS	
3	5-3 0' CL	GROUNDWATER	
4	5-4 0' BTX TPH	WASTEWATER	
5	5-5 0' BTX TPH	SOIL	
6	5-6 0' BTX TPH	OIL	
7	5-7 0' BTX TPH	SLUDGE	
		OTHER:	
		ACID/BASE:	
		ICE / COOL	
		OTHER:	
		DATE	TIME
		5/6/19	11:00
			11:10
			11:20
			11:30
			11:40
			11:50
			12:00
		TPH	
		BTX	
		TOTAL CHLORIDES	
Relinquished By: MICHAEL COLLIER		Received By: JUANITA SANCHEZ	
Date: 5-7-19		Date: 5-7-19	
Time: 16:05		Time: 16:05	
Delivered By: (Circle One)		Sample Condition	
Sampler - UPS - Bus - Other:		Cool <input type="checkbox"/> Intact <input type="checkbox"/>	
S-4 & 6		Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Checked By: (Initials)	
		VS	
Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326		REMARKS:	
		RUSH	

Analytical Report 624019

for
Talon/LPE Co.

Project Manager: Chris Jones

Corazon St 5H

700778.119.01

14-MAY-19

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)



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14-MAY-19

Project Manager: **Chris Jones**

Talon/LPE Co.

921 N Bivins St

Amarillo, TX 79107

Reference: XENCO Report No(s): **624019**

Corazon St 5H

Project Address:

Chris Jones:

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) 624019. 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. 624019 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,

Jessica Kramer

Project Assistant

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 624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-1 Bottom	S	05-09-19 09:00	6 In	624019-001
S-2 Bottom	S	05-09-19 09:05	6 In	624019-002
S-5 Bottom	S	05-09-19 09:00	6 In	624019-003
S-6 Bottom	S	05-09-19 09:10	6 In	624019-004
S-8 Side Wall	S	05-09-19 09:20	6 In	624019-005
S-9 Side Wall	S	05-09-19 09:15	6 In	624019-006
S-10 Side Wall	S	05-09-19 09:30	6 In	624019-007
S-11 Side Wall	S	05-09-19 09:40	6 In	624019-008
S-12 Side Wall	S	05-09-19 09:50	6 In	624019-009



CASE NARRATIVE

Client Name: Talon/LPE Co.

Project Name: Corazon St 5H

Project ID: 700778.119.01
Work Order Number(s): 624019

Report Date: 14-MAY-19
Date Received: 05/13/2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3088922 BTEX by EPA 8021B

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

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 624019-001,624019-004,624019-003,624019-009,624019-005,624019-008.

Batch: LBA-3088952 Chloride by EPA 300

Lab Sample ID 624019-003 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 624019-001, -002, -003, -004, -005, -006, -007, -008, -009.

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

Batch: LBA-3088961 TPH by SW8015 Mod

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

Samples affected are: 624019-005.



Certificate of Analytical Results

624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id: S-1 Bottom

Matrix: Soil

Sample Depth: 6 In

Lab Sample Id: 624019-001

Date Collected: 05.09.19 09.00

Date Received: 05.13.19 10.50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3088952

Date Prep: 05.13.19 17.00

Prep seq: 7677763

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	204	5.00	0.858	mg/kg	05.13.19 21:04		1

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3088961

Date Prep: 05.13.19 17.00

Prep seq: 7677810

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	240	15.0	7.98	mg/kg	05.14.19 00:13		1
Diesel Range Organics (DRO)	C10C28DRO	1750	15.0	8.10	mg/kg	05.14.19 00:13		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	132	15.0	8.10	mg/kg	05.14.19 00:13		1
Total TPH	PHC635	2120		7.98	mg/kg	05.14.19 00:13		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	117	70 - 135	%		
o-Terphenyl	127	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3088922

Date Prep: 05.13.19 14.30

Prep seq: 7677773

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000726	0.00199	0.000383	mg/kg	05.14.19 03:01	J	1
Toluene	108-88-3	0.0257	0.00199	0.000453	mg/kg	05.14.19 03:01		1
Ethylbenzene	100-41-4	0.0336	0.00199	0.000561	mg/kg	05.14.19 03:01		1
m,p-Xylenes	179601-23-1	0.273	0.00398	0.00101	mg/kg	05.14.19 03:01		1
o-Xylene	95-47-6	0.116	0.00199	0.000342	mg/kg	05.14.19 03:01		1
Total Xylenes	1330-20-7	0.389		0.000342	mg/kg	05.14.19 03:01		
Total BTEX		0.449		0.000342	mg/kg	05.14.19 03:01		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	105	70 - 130	%		
4-Bromofluorobenzene	187	70 - 130	%		**



Certificate of Analytical Results

624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id: S-2 Bottom

Matrix: Soil

Sample Depth: 6 In

Lab Sample Id: 624019-002

Date Collected: 05.09.19 09.05

Date Received: 05.13.19 10.50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3088952

Date Prep: 05.13.19 17.00

Prep seq: 7677763

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	880	5.00	0.858	mg/kg	05.13.19 21:09		1

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3088961

Date Prep: 05.13.19 17.00

Prep seq: 7677810

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<7.99	15.0	7.99	mg/kg	05.14.19 00:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	47.2	15.0	8.12	mg/kg	05.14.19 00:34		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	8.14	15.0	8.12	mg/kg	05.14.19 00:34	J	1
Total TPH	PHC635	55.3		7.99	mg/kg	05.14.19 00:34		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	96	70 - 135	%		
o-Terphenyl	97	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3088922

Date Prep: 05.13.19 14.30

Prep seq: 7677773

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000389	0.00202	0.000389	mg/kg	05.14.19 02:42	U	1
Toluene	108-88-3	<0.000460	0.00202	0.000460	mg/kg	05.14.19 02:42	U	1
Ethylbenzene	100-41-4	<0.000570	0.00202	0.000570	mg/kg	05.14.19 02:42	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00404	0.00102	mg/kg	05.14.19 02:42	U	1
o-Xylene	95-47-6	<0.000348	0.00202	0.000348	mg/kg	05.14.19 02:42	U	1
Total Xylenes	1330-20-7	<0.000348		0.000348	mg/kg	05.14.19 02:42	U	
Total BTEX		<0.000348		0.000348	mg/kg	05.14.19 02:42	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	123	70 - 130	%		



Certificate of Analytical Results

624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id: S-5 Bottom

Matrix: Soil

Sample Depth: 6 In

Lab Sample Id: 624019-003

Date Collected: 05.09.19 09.00

Date Received: 05.13.19 10.50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3088952

Date Prep: 05.13.19 17.00

Prep seq: 7677763

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	7450	50.0	8.58	mg/kg	05.13.19 21:15	X	10

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3088961

Date Prep: 05.13.19 17.00

Prep seq: 7677810

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	1730	74.9	39.9	mg/kg	05.14.19 09:59		5
Diesel Range Organics (DRO)	C10C28DRO	8790	74.9	40.6	mg/kg	05.14.19 09:59		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	839	74.9	40.6	mg/kg	05.14.19 09:59		5
Total TPH	PHC635	11400		39.9	mg/kg	05.14.19 09:59		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	93	70 - 135	%		
o-Terphenyl	95	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3088922

Date Prep: 05.13.19 14.30

Prep seq: 7677773

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.105	0.0998	0.0192	mg/kg	05.14.19 07:06		50
Toluene	108-88-3	0.0928	0.0998	0.0227	mg/kg	05.14.19 07:06	J	50
Ethylbenzene	100-41-4	2.61	0.0998	0.0282	mg/kg	05.14.19 07:06		50
m,p-Xylenes	179601-23-1	22.7	0.200	0.0506	mg/kg	05.14.19 07:06		50
o-Xylene	95-47-6	1.99	0.0998	0.0172	mg/kg	05.14.19 07:06		50
Total Xylenes	1330-20-7	24.7		0.0172	mg/kg	05.14.19 07:06		
Total BTEX		27.5		0.0172	mg/kg	05.14.19 07:06		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	340	70 - 130	%		**



Certificate of Analytical Results

624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id: S-6 Bottom

Matrix: Soil

Sample Depth: 6 In

Lab Sample Id: 624019-004

Date Collected: 05.09.19 09.10

Date Received: 05.13.19 10.50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3088952

Date Prep: 05.13.19 17.00

Prep seq: 7677763

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	3870	24.8	4.25	mg/kg	05.13.19 21:30		5

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3088961

Date Prep: 05.13.19 17.00

Prep seq: 7677810

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	476	15.0	7.99	mg/kg	05.14.19 01:14		1
Diesel Range Organics (DRO)	C10C28DRO	3930	15.0	8.12	mg/kg	05.14.19 01:14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	272	15.0	8.12	mg/kg	05.14.19 01:14		1
Total TPH	PHC635	4680		7.99	mg/kg	05.14.19 01:14		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	129	70 - 135	%		
o-Terphenyl	111	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3088922

Date Prep: 05.13.19 14.30

Prep seq: 7677773

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000562	0.00201	0.000386	mg/kg	05.14.19 04:15	J	1
Toluene	108-88-3	0.00126	0.00201	0.000457	mg/kg	05.14.19 04:15	J	1
Ethylbenzene	100-41-4	0.0127	0.00201	0.000567	mg/kg	05.14.19 04:15		1
m,p-Xylenes	179601-23-1	0.271	0.00402	0.00102	mg/kg	05.14.19 04:15		1
o-Xylene	95-47-6	0.0268	0.00201	0.000346	mg/kg	05.14.19 04:15		1
Total Xylenes	1330-20-7	0.298		0.000346	mg/kg	05.14.19 04:15		
Total BTEX		0.312		0.000346	mg/kg	05.14.19 04:15		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	70 - 130	%		
4-Bromofluorobenzene	200	70 - 130	%		**



Certificate of Analytical Results

624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id: S-8 Side Wall

Matrix: Soil

Sample Depth: 6 In

Lab Sample Id: 624019-005

Date Collected: 05.09.19 09.20

Date Received: 05.13.19 10.50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3088952

Date Prep: 05.13.19 17.00

Prep seq: 7677763

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	2750	24.9	4.27	mg/kg	05.13.19 21:35		5

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3088961

Date Prep: 05.13.19 17.00

Prep seq: 7677810

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	653	74.9	40.0	mg/kg	05.14.19 10:18		5
Diesel Range Organics (DRO)	C10C28DRO	10400	74.9	40.6	mg/kg	05.14.19 10:18		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1150	74.9	40.6	mg/kg	05.14.19 10:18		5
Total TPH	PHC635	12200		40.0	mg/kg	05.14.19 10:18		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	127	70 - 135	%		
o-Terphenyl	176	70 - 135	%		**

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3088922

Date Prep: 05.13.19 14.30

Prep seq: 7677773

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.0907	0.0199	0.00383	mg/kg	05.14.19 06:47		10
Toluene	108-88-3	0.0155	0.0199	0.00454	mg/kg	05.14.19 06:47	J	10
Ethylbenzene	100-41-4	0.124	0.0199	0.00563	mg/kg	05.14.19 06:47		10
m,p-Xylenes	179601-23-1	0.981	0.0398	0.0101	mg/kg	05.14.19 06:47		10
o-Xylene	95-47-6	0.570	0.0199	0.00343	mg/kg	05.14.19 06:47		10
Total Xylenes	1330-20-7	1.55		0.00343	mg/kg	05.14.19 06:47		
Total BTEX		1.78		0.00343	mg/kg	05.14.19 06:47		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	105	70 - 130	%		
4-Bromofluorobenzene	216	70 - 130	%		**



Certificate of Analytical Results

624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id: S-9 Side Wall

Matrix: Soil

Sample Depth: 6 In

Lab Sample Id: 624019-006

Date Collected: 05.09.19 09.15

Date Received: 05.13.19 10.50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3088952

Date Prep: 05.13.19 17.00

Prep seq: 7677763

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	3490	25.2	4.33	mg/kg	05.13.19 21:51		5

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3088961

Date Prep: 05.13.19 17.00

Prep seq: 7677810

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<7.98	15.0	7.98	mg/kg	05.14.19 01:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	81.9	15.0	8.10	mg/kg	05.14.19 01:55		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	17.8	15.0	8.10	mg/kg	05.14.19 01:55		1
Total TPH	PHC635	99.7		7.98	mg/kg	05.14.19 01:55		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	99	70 - 135	%		
o-Terphenyl	99	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3088922

Date Prep: 05.13.19 14.30

Prep seq: 7677773

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	05.14.19 04:34	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	05.14.19 04:34	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	05.14.19 04:34	U	1
m,p-Xylenes	179601-23-1	0.00302	0.00400	0.00101	mg/kg	05.14.19 04:34	J	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	05.14.19 04:34	U	1
Total Xylenes	1330-20-7	0.00302		0.000344	mg/kg	05.14.19 04:34		
Total BTEX		0.00302		0.000344	mg/kg	05.14.19 04:34		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	124	70 - 130	%		



Certificate of Analytical Results

624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id: S-10 Side Wall

Matrix: Soil

Sample Depth: 6 In

Lab Sample Id: 624019-007

Date Collected: 05.09.19 09.30

Date Received: 05.13.19 10.50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3088952

Date Prep: 05.13.19 17.00

Prep seq: 7677763

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	4860	49.6	8.52	mg/kg	05.13.19 21:56		10

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3088961

Date Prep: 05.13.19 17.00

Prep seq: 7677810

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	13.3	15.0	7.99	mg/kg	05.14.19 02:15	J	1
Diesel Range Organics (DRO)	C10C28DRO	2050	15.0	8.11	mg/kg	05.14.19 02:15		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	192	15.0	8.11	mg/kg	05.14.19 02:15		1
Total TPH	PHC635	2260		7.99	mg/kg	05.14.19 02:15		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	100	70 - 135	%		
o-Terphenyl	123	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3088922

Date Prep: 05.13.19 14.30

Prep seq: 7677773

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000388	0.00202	0.000388	mg/kg	05.14.19 04:53	U	1
Toluene	108-88-3	<0.000459	0.00202	0.000459	mg/kg	05.14.19 04:53	U	1
Ethylbenzene	100-41-4	<0.000569	0.00202	0.000569	mg/kg	05.14.19 04:53	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00403	0.00102	mg/kg	05.14.19 04:53	U	1
o-Xylene	95-47-6	<0.000347	0.00202	0.000347	mg/kg	05.14.19 04:53	U	1
Total Xylenes	1330-20-7	<0.000347		0.000347	mg/kg	05.14.19 04:53	U	
Total BTEX		<0.000347		0.000347	mg/kg	05.14.19 04:53	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	125	70 - 130	%		



Certificate of Analytical Results

624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id: S-11 Side Wall

Matrix: Soil

Sample Depth: 6 In

Lab Sample Id: 624019-008

Date Collected: 05.09.19 09.40

Date Received: 05.13.19 10.50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3088952

Date Prep: 05.13.19 17.00

Prep seq: 7677763

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	76.2	5.00	0.858	mg/kg	05.13.19 22:01		1

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3088961

Date Prep: 05.13.19 17.00

Prep seq: 7677810

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	606	75.0	40.0	mg/kg	05.14.19 10:38		5
Diesel Range Organics (DRO)	C10C28DRO	7260	75.0	40.6	mg/kg	05.14.19 10:38		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	738	75.0	40.6	mg/kg	05.14.19 10:38		5
Total TPH	PHC635	8600		40.0	mg/kg	05.14.19 10:38		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	127	70 - 135	%		
o-Terphenyl	94	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3088922

Date Prep: 05.13.19 14.30

Prep seq: 7677773

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000382	0.00198	0.000382	mg/kg	05.14.19 05:12	U	1
Toluene	108-88-3	0.0108	0.00198	0.000452	mg/kg	05.14.19 05:12		1
Ethylbenzene	100-41-4	0.0614	0.00198	0.000560	mg/kg	05.14.19 05:12		1
m,p-Xylenes	179601-23-1	0.239	0.00397	0.00101	mg/kg	05.14.19 05:12		1
o-Xylene	95-47-6	0.113	0.00198	0.000342	mg/kg	05.14.19 05:12		1
Total Xylenes	1330-20-7	0.352		0.000342	mg/kg	05.14.19 05:12		
Total BTEX		0.424		0.000342	mg/kg	05.14.19 05:12		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	86	70 - 130	%		
4-Bromofluorobenzene	210	70 - 130	%		**



Certificate of Analytical Results

624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id: S-12 Side Wall

Matrix: Soil

Sample Depth: 6 In

Lab Sample Id: 624019-009

Date Collected: 05.09.19 09.50

Date Received: 05.13.19 10.50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3088952

Date Prep: 05.13.19 17.00

Prep seq: 7677763

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	4570	25.1	4.31	mg/kg	05.13.19 22:06		5

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3088961

Date Prep: 05.13.19 17.00

Prep seq: 7677810

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	221	15.0	7.99	mg/kg	05.14.19 02:55		1
Diesel Range Organics (DRO)	C10C28DRO	4980	15.0	8.12	mg/kg	05.14.19 02:55		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	290	15.0	8.12	mg/kg	05.14.19 02:55		1
Total TPH	PHC635	5490		7.99	mg/kg	05.14.19 02:55		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	122	70 - 135	%		
o-Terphenyl	102	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3088922

Date Prep: 05.13.19 14.30

Prep seq: 7677773

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000387	0.00201	0.000387	mg/kg	05.14.19 05:31	U	1
Toluene	108-88-3	<0.000458	0.00201	0.000458	mg/kg	05.14.19 05:31	U	1
Ethylbenzene	100-41-4	0.00887	0.00201	0.000568	mg/kg	05.14.19 05:31		1
m,p-Xylenes	179601-23-1	0.0479	0.00402	0.00102	mg/kg	05.14.19 05:31		1
o-Xylene	95-47-6	0.00582	0.00201	0.000346	mg/kg	05.14.19 05:31		1
Total Xylenes	1330-20-7	0.0537		0.000346	mg/kg	05.14.19 05:31		
Total BTEX		0.0626		0.000346	mg/kg	05.14.19 05:31		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	90	70 - 130	%		
4-Bromofluorobenzene	168	70 - 130	%		**



Certificate of Analytical Results

624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id: 7677763-1-BLK

Matrix: Solid

Sample Depth:

Lab Sample Id: 7677763-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3088952

Date Prep: 05.13.19 17.00

Prep seq: 7677763

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.858	5.00	0.858	mg/kg	05.13.19 19:47	U	1

Sample Id: 7677773-1-BLK

Matrix: Solid

Sample Depth:

Lab Sample Id: 7677773-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3088922

Date Prep: 05.13.19 14.30

Prep seq: 7677773

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	05.13.19 23:51	U	1
Toluene	108-88-3	<0.000453	0.00199	0.000453	mg/kg	05.13.19 23:51	U	1
Ethylbenzene	100-41-4	<0.000561	0.00199	0.000561	mg/kg	05.13.19 23:51	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	05.13.19 23:51	U	1
o-Xylene	95-47-6	<0.000342	0.00199	0.000342	mg/kg	05.13.19 23:51	U	1
Total Xylenes	1330-20-7	<0.000342		0.000342	mg/kg	05.13.19 23:51	U	
Total BTEX		<0.000342		0.000342	mg/kg	05.13.19 23:51	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	101	70 - 130	%		
4-Bromofluorobenzene	107	70 - 130	%		



Certificate of Analytical Results

624019



Talon/LPE Co., Amarillo, TX

Corazon St 5H

Sample Id: 7677810-1-BLK

Matrix: Solid

Sample Depth:

Lab Sample Id: 7677810-1-BLK

Date Collected:

Date Received:

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3088961

Date Prep: 05.13.19 17.00

Prep seq: 7677810

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<8.00	15.0	8.00	mg/kg	05.13.19 19:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<8.13	15.0	8.13	mg/kg	05.13.19 19:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<8.13	15.0	8.13	mg/kg	05.13.19 19:08	U	1
Total TPH	PHC635	<8.00		8.00	mg/kg	05.13.19 19:08	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	99	70 - 135	%		
o-Terphenyl	101	70 - 135	%		



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



Form 2 - Surrogate Recoveries

Project Name: Corazon St 5H

Work Orders : 624019,

Project ID: 700778.119.01

Lab Batch #: 3088922

Sample: 7677773-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/13/19 22:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0276	0.0300	92	70-130	
4-Bromofluorobenzene	0.0330	0.0300	110	70-130	

Lab Batch #: 3088922

Sample: 7677773-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/13/19 22:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0280	0.0300	93	70-130	
4-Bromofluorobenzene	0.0325	0.0300	108	70-130	

Lab Batch #: 3088922

Sample: 624018-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/13/19 22:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0281	0.0300	94	70-130	
4-Bromofluorobenzene	0.0342	0.0300	114	70-130	

Lab Batch #: 3088922

Sample: 624018-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/13/19 23:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0284	0.0300	95	70-130	
4-Bromofluorobenzene	0.0337	0.0300	112	70-130	

Lab Batch #: 3088922

Sample: 7677773-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/13/19 23:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0303	0.0300	101	70-130	
4-Bromofluorobenzene	0.0320	0.0300	107	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Corazon St 5H

Work Orders : 624019,

Project ID: 700778.119.01

Lab Batch #: 3088961

Sample: 7677810-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/13/19 19:08

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.2	100	99	70-135	
o-Terphenyl	50.7	50.0	101	70-135	

Lab Batch #: 3088961

Sample: 7677810-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/13/19 19:28

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	64.2	50.0	128	70-135	

Lab Batch #: 3088961

Sample: 7677810-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/13/19 19:48

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	100	127	70-135	
o-Terphenyl	62.6	50.0	125	70-135	

Lab Batch #: 3088961

Sample: 624018-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/13/19 20:29

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	56.8	50.0	114	70-135	

Lab Batch #: 3088961

Sample: 624018-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/13/19 20:49

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	99.8	121	70-135	
o-Terphenyl	63.7	49.9	128	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



BS / BSD Recoveries



Project Name: Corazon St 5H

Work Order #: 624019

Project ID: 700778.119.01

Analyst: SCM

Date Prepared: 05/13/2019

Date Analyzed: 05/13/2019

Lab Batch ID: 3088922

Sample: 7677773-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.000386	0.100	0.102	102	0.0996	0.103	103	1	70-130	35	
Toluene	<0.000457	0.100	0.102	102	0.0996	0.100	100	2	70-130	35	
Ethylbenzene	<0.000566	0.100	0.113	113	0.0996	0.110	110	3	70-130	35	
m,p-Xylenes	<0.00102	0.200	0.235	118	0.199	0.230	116	2	70-130	35	
o-Xylene	<0.000345	0.100	0.115	115	0.0996	0.113	113	2	70-130	35	

Analyst: CHE

Date Prepared: 05/13/2019

Date Analyzed: 05/13/2019

Lab Batch ID: 3088952

Sample: 7677763-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<0.858	250	259	104	250	260	104	0	90-110	20	

Relative Percent Difference RPD = $200 \times (C-F) / (C+F)$

Blank Spike Recovery [D] = $100 \times (C) / [B]$

Blank Spike Duplicate Recovery [G] = $100 \times (F) / [E]$

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: Corazon St 5H

Work Order #: 624019

Project ID: 700778.119.01

Analyst: ARM

Date Prepared: 05/13/2019

Date Analyzed: 05/13/2019

Lab Batch ID: 3088961

Sample: 7677810-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1010	101	1000	1010	101	0	70-135	20	
Diesel Range Organics (DRO)	<8.13	1000	1020	102	1000	1050	105	3	70-135	20	

Relative Percent Difference RPD = $200 * [(C-F)/(C+F)]$

Blank Spike Recovery [D] = $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries



Project Name: Corazon St 5H

Work Order #: 624019
Lab Batch ID: 3088922
Date Analyzed: 05/13/2019
Reporting Units: mg/kg

QC- Sample ID: 624018-001 S
Date Prepared: 05/13/2019
Batch #: 1
Matrix: Soil
Analyst: SCM

Project ID: 700778.119.01

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000384	0.0998	0.0940	94	0.101	0.0980	97	4	70-130	35	
Toluene	<0.000455	0.0998	0.0919	92	0.101	0.0952	94	4	70-130	35	
Ethylbenzene	<0.000564	0.0998	0.0970	97	0.101	0.102	101	5	70-130	35	
m,p-Xylenes	<0.00101	0.200	0.202	101	0.201	0.212	105	5	70-130	35	
o-Xylene	<0.000344	0.0998	0.100	100	0.101	0.105	104	5	70-130	35	

Lab Batch ID: 3088952
Date Analyzed: 05/13/2019
Reporting Units: mg/kg

QC- Sample ID: 624018-001 S
Date Prepared: 05/13/2019
Batch #: 1
Matrix: Soil
Analyst: CHE

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	9.45	253	272	104	253	271	103	0	90-110	20	

Lab Batch ID: 3088952
Date Analyzed: 05/13/2019
Reporting Units: mg/kg

QC- Sample ID: 624019-003 S
Date Prepared: 05/13/2019
Batch #: 1
Matrix: Soil
Analyst: CHE

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	7450	250	7530	32	250	7530	32	0	90-110	20	X

Matrix Spike Percent Recovery $[D] = 100 \cdot (C-A)/B$
Relative Percent Difference $RPD = 200 \cdot (C-F)/(C+F)$

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries



Project Name: Corazon St 5H

Work Order #: 624019

Project ID: 700778.119.01

Lab Batch ID: 3088961

QC- Sample ID: 624018-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 05/13/2019

Date Prepared: 05/13/2019

Analyst: ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	11.3	1000	1010	100	998	1020	101	1	70-135	20	
Diesel Range Organics (DRO)	<8.13	1000	1020	102	998	1010	101	1	70-135	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+F)]$

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Chain of Custody

Work Order No:

1024019

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) 820-2000

www.xenco.com

Page 1 of 1

Project Manager:	CHARLES JONES	Bill To: (if different)	
Company Name:	Talon / LPE	Company Name:	
Address:	408 W. Texas Ave.	Address:	
City, State ZIP:	Attesia, NM 88210	City, State ZIP:	
Phone:	575-616-4022 or 575-746-8905	Email:	CJONES@TALONLPE.COM
Project Name:	Core AZ 201 5th	Turn Around	
Project Number:	700718.119.01	Routine	<input type="checkbox"/>
P.O. Number:	700718.119.01	Rush:	<input checked="" type="checkbox"/>
Sampler's Name:	Michael Couler	Due Date:	

SAMPLE RECEIPT		Temp Blank:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Temperature (°C):	510.4	Thermometer ID:	12		
Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor:	-0.1		
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Total Containers:			
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX	TPH	TOTAL CHLORIDES	Work Order Notes
S-1 Bottom	soil	5/9/19	9:00am	6"	1	✓	✓	✓	
S-2 Bottom		5/9/19	9:05am			✓	✓	✓	
S-3 Bottom		5/10/19	9:00am			✓	✓	✓	
S-4 Bottom		5/10/19	9:10am			✓	✓	✓	
S-5 Side Wall		5/10/19	9:20am			✓	✓	✓	
S-6 Side Wall		5/10/19	9:15am			✓	✓	✓	
S-7 Side Wall		5/10/19	9:30am			✓	✓	✓	
S-8 Side Wall		5/10/19	9:40am			✓	✓	✓	
S-9 Side Wall		5/10/19	9:50am			✓	✓	✓	

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 Ti 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 Ti U		1631 / 245.1 / 7470 / 7471 : Hg	
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 MCL BL	5/10/19 15:10	2	5/13/19	1850	
3		4			
5		6			



XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In



Client: Talon/LPE Co.

Date/ Time Received: 05/13/2019 10:50:00 AM

Work Order #: 624019

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)?	.4
#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

Brianna Teel

Date: 05/13/2019

Checklist reviewed by:

Jessica Kramer

Jessica Kramer

Date: 05/13/2019



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

May 23, 2019

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: CORAZON ST UNIT #5H

Enclosed are the results of analyses for samples received by the laboratory on 05/22/19 14:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

 Received: 05/22/2019
 Reported: 05/23/2019
 Project Name: CORAZON ST UNIT #5H
 Project Number: 700778.119.01
 Project Location: COG - LEA CO NM

 Sampling Date: 05/21/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S-5 A 1' (H901844-01)

BTX 8021B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	05/23/2019	ND	2.04	102	2.00	6.05	
Toluene*	0.763	0.200	05/23/2019	ND	2.20	110	2.00	5.30	
Ethylbenzene*	8.07	0.200	05/23/2019	ND	2.11	105	2.00	5.00	QM-07
Total Xylenes*	36.2	0.600	05/23/2019	ND	6.36	106	6.00	4.81	QM-07
Total BTEX	45.1	1.20	05/23/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 150 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	1490	100	05/23/2019	ND	185	92.6	200	1.14	QM-07
DRO >C10-C28*	10500	100	05/23/2019	ND	224	112	200	8.14	QM-07
EXT DRO >C28-C36	2030	100	05/23/2019	ND					

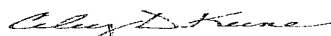
Surrogate: 1-Chlorooctane 200 % 41-142

Surrogate: 1-Chlorooctadecane 365 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	05/22/2019	Sampling Date:	05/21/2019
Reported:	05/23/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-6 A 1' (H901844-02)

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2019	ND	2.04	102	2.00	6.05	
Toluene*	<0.050	0.050	05/23/2019	ND	2.20	110	2.00	5.30	
Ethylbenzene*	<0.050	0.050	05/23/2019	ND	2.11	105	2.00	5.00	
Total Xylenes*	0.246	0.150	05/23/2019	ND	6.36	106	6.00	4.81	
Total BTEX	<0.300	0.300	05/23/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 94.8 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/22/2019	ND	185	92.6	200	1.14	
DRO >C10-C28*	493	10.0	05/22/2019	ND	224	112	200	8.14	
EXT DRO >C28-C36	118	10.0	05/22/2019	ND					

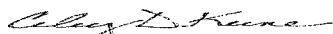
Surrogate: 1-Chlorooctane 91.8 % 41-142

Surrogate: 1-Chlorooctadecane 114 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	05/22/2019	Sampling Date:	05/21/2019
Reported:	05/23/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-7 A 1' (H901844-03)

BTEX 8021B			mg/kg Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2019	ND	2.04	102	2.00	6.05	
Toluene*	<0.050	0.050	05/23/2019	ND	2.20	110	2.00	5.30	
Ethylbenzene*	<0.050	0.050	05/23/2019	ND	2.11	105	2.00	5.00	
Total Xylenes*	<0.150	0.150	05/23/2019	ND	6.36	106	6.00	4.81	
Total BTEX	<0.300	0.300	05/23/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 93.5 % 73.3-129

TPH 8015M			mg/kg Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/22/2019	ND	185	92.6	200	1.14	
DRO >C10-C28*	364	10.0	05/22/2019	ND	224	112	200	8.14	
EXT DRO >C28-C36	83.1	10.0	05/22/2019	ND					

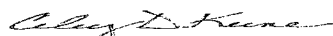
Surrogate: 1-Chlorooctane 92.1 % 41-142

Surrogate: 1-Chlorooctadecane 111 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	05/22/2019	Sampling Date:	05/21/2019
Reported:	05/23/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-8 A 1' (H901844-04)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2019	ND	2.04	102	2.00	6.05	
Toluene*	<0.050	0.050	05/23/2019	ND	2.20	110	2.00	5.30	
Ethylbenzene*	<0.050	0.050	05/23/2019	ND	2.11	105	2.00	5.00	
Total Xylenes*	<0.150	0.150	05/23/2019	ND	6.36	106	6.00	4.81	
Total BTX	<0.300	0.300	05/23/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 95.3 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/22/2019	ND	185	92.6	200	1.14	
DRO >C10-C28*	52.1	10.0	05/22/2019	ND	224	112	200	8.14	
EXT DRO >C28-C36	<10.0	10.0	05/22/2019	ND					

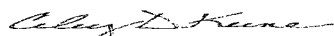
Surrogate: 1-Chlorooctane 93.7 % 41-142

Surrogate: 1-Chlorooctadecane 108 % 37.6-147

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Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	05/22/2019	Sampling Date:	05/21/2019
Reported:	05/23/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S11 A 1' (H901844-05)

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2019	ND	2.04	102	2.00	6.05	
Toluene*	<0.050	0.050	05/23/2019	ND	2.20	110	2.00	5.30	
Ethylbenzene*	0.123	0.050	05/23/2019	ND	2.11	105	2.00	5.00	
Total Xylenes*	0.743	0.150	05/23/2019	ND	6.36	106	6.00	4.81	
Total BTEX	0.866	0.300	05/23/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	31.0	10.0	05/22/2019	ND	185	92.6	200	1.14	
DRO >C10-C28*	1570	10.0	05/22/2019	ND	224	112	200	8.14	
EXT DRO >C28-C36	457	10.0	05/22/2019	ND					

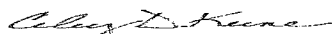
Surrogate: 1-Chlorooctane 100 % 41-142

Surrogate: 1-Chlorooctadecane 144 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	05/22/2019	Sampling Date:	05/21/2019
Reported:	05/23/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-12 A 1' (H901844-06)

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2019	ND	2.04	102	2.00	6.05	
Toluene*	<0.050	0.050	05/23/2019	ND	2.20	110	2.00	5.30	
Ethylbenzene*	<0.050	0.050	05/23/2019	ND	2.11	105	2.00	5.00	
Total Xylenes*	<0.150	0.150	05/23/2019	ND	6.36	106	6.00	4.81	
Total BTEX	<0.300	0.300	05/23/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 94.4 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/22/2019	ND	185	92.6	200	1.14	
DRO >C10-C28*	19.1	10.0	05/22/2019	ND	224	112	200	8.14	
EXT DRO >C28-C36	<10.0	10.0	05/22/2019	ND					

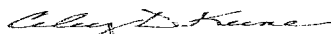
Surrogate: 1-Chlorooctane 89.3 % 41-142

Surrogate: 1-Chlorooctadecane 99.8 % 37.6-147

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	05/22/2019	Sampling Date:	05/21/2019
Reported:	05/23/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-1 A 1' (H901844-07)

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2019	ND	2.04	102	2.00	6.05	
Toluene*	<0.050	0.050	05/23/2019	ND	2.20	110	2.00	5.30	
Ethylbenzene*	<0.050	0.050	05/23/2019	ND	2.11	105	2.00	5.00	
Total Xylenes*	<0.150	0.150	05/23/2019	ND	6.36	106	6.00	4.81	
Total BTEX	<0.300	0.300	05/23/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 98.0 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/22/2019	ND	185	92.6	200	1.14		
DRO >C10-C28*	2210	10.0	05/22/2019	ND	224	112	200	8.14		
EXT DRO >C28-C36	601	10.0	05/22/2019	ND						

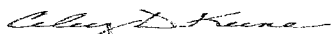
Surrogate: 1-Chlorooctane 95.3 % 41-142

Surrogate: 1-Chlorooctadecane 159 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	05/22/2019	Sampling Date:	05/21/2019
Reported:	05/23/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-10 A 1' (H901844-08)

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2019	ND	2.04	102	2.00	6.05	
Toluene*	<0.050	0.050	05/23/2019	ND	2.20	110	2.00	5.30	
Ethylbenzene*	<0.050	0.050	05/23/2019	ND	2.11	105	2.00	5.00	
Total Xylenes*	<0.150	0.150	05/23/2019	ND	6.36	106	6.00	4.81	
Total BTEX	<0.300	0.300	05/23/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.0 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/22/2019	ND	185	92.6	200	1.14	
DRO >C10-C28*	409	10.0	05/22/2019	ND	224	112	200	8.14	
EXT DRO >C28-C36	140	10.0	05/22/2019	ND					

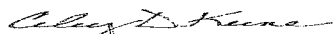
Surrogate: 1-Chlorooctane 91.5 % 41-142

Surrogate: 1-Chlorooctadecane 117 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

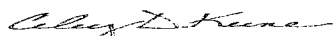
Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

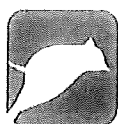
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Celey D. Keene, Lab Director/Quality Manager



CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: TOLON LPE				P.O. #: 760178.119.01			
Project Manager: CHARIS JONES				Company: CONCHO			
Address: 408 W. TEXAS				Attn: JOE TRAVAREZ			
City: ARTESIA				State: NM Zip: 88210			
Phone #: 575-631-6477				Fax #:			
Project #: 760178.119.01				Project Owner: CONCHO COIL-			
Project Name: CORAZON SH				State: Zip:			
Project Location: LEA COUNTY				Phone #:			
Sampler Name: MICHAEL COWIE				Fax #:			

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS	MATRIX						DATE	TIME									
			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :											ACID/BASE:
H901844	1 S-5 A 1'	G 1	V							5/21/9	2:00	V	T PH						
	2 S-6 A 1'										2:10		BTEX						
	3 S-7 A 1'										2:20								
	4 S-8 A 1'										2:30								
	5 S-11 A 1'										2:40								
	6 S-12 A 1'										2:50								
	7 S-1 A 1'										8:00								
	8 S-10 A 1'										3:10								

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Relinquished By: [Signature]	Date: 5-22-19	Received By: [Signature]	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Refiniquished By: [Signature]	Date: 5-22-19	Received By: [Signature]	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Time: 3:36 PM	Sample Condition: Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>	CHECKED BY: [Signature] (Initials)	
REMARKS: RUSH				



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

May 30, 2019

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: CORAZON ST UNIT #5H

Enclosed are the results of analyses for samples received by the laboratory on 05/29/19 13:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	05/29/2019	Sampling Date:	05/29/2019
Reported:	05/30/2019	Sampling Type:	Soil
Project Name:	CORAZON ST UNIT #5H	Sampling Condition:	Cool & Intact
Project Number:	700778.119.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: S-1 B 2' (H901886-01)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/30/2019	ND	1.84	92.1	2.00	0.0184	
Toluene*	<0.050	0.050	05/30/2019	ND	1.99	99.4	2.00	0.178	
Ethylbenzene*	<0.050	0.050	05/30/2019	ND	1.89	94.5	2.00	0.213	
Total Xylenes*	<0.150	0.150	05/30/2019	ND	5.72	95.3	6.00	0.0278	
Total BTX	<0.300	0.300	05/30/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 92.2 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/29/2019	ND	200	99.8	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/29/2019	ND	208	104	200	4.22	
EXT DRO >C28-C36	<10.0	10.0	05/29/2019	ND					

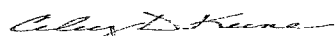
Surrogate: 1-Chlorooctane 79.8 % 41-142

Surrogate: 1-Chlorooctadecane 85.5 % 37.6-147

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received: 05/29/2019
 Reported: 05/30/2019
 Project Name: CORAZON ST UNIT #5H
 Project Number: 700778.119.01
 Project Location: COG - LEA CO NM

Sampling Date: 05/29/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S-5 B 2' (H901886-02)

BTEx 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/30/2019	ND	1.84	92.1	2.00	0.0184	
Toluene*	<0.050	0.050	05/30/2019	ND	1.99	99.4	2.00	0.178	
Ethylbenzene*	<0.050	0.050	05/30/2019	ND	1.89	94.5	2.00	0.213	
Total Xylenes*	<0.150	0.150	05/30/2019	ND	5.72	95.3	6.00	0.0278	
Total BTEx	<0.300	0.300	05/30/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 94.3 % 73.3-129

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/29/2019	ND	200	99.8	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/29/2019	ND	208	104	200	4.22	
EXT DRO >C28-C36	<10.0	10.0	05/29/2019	ND					

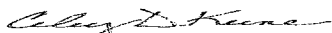
Surrogate: 1-Chlorooctane 82.0 % 41-142

Surrogate: 1-Chlorooctadecane 85.3 % 37.6-147

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

 Received: 05/29/2019
 Reported: 05/30/2019
 Project Name: CORAZON ST UNIT #5H
 Project Number: 700778.119.01
 Project Location: COG - LEA CO NM

 Sampling Date: 05/29/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S-11 B 2' (H901886-03)

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/30/2019	ND	1.84	92.1	2.00	0.0184	
Toluene*	<0.050	0.050	05/30/2019	ND	1.99	99.4	2.00	0.178	
Ethylbenzene*	<0.050	0.050	05/30/2019	ND	1.89	94.5	2.00	0.213	
Total Xylenes*	<0.150	0.150	05/30/2019	ND	5.72	95.3	6.00	0.0278	
Total BTEx	<0.300	0.300	05/30/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 92.0 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/30/2019	ND	200	99.8	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/30/2019	ND	208	104	200	4.22	
EXT DRO >C28-C36	<10.0	10.0	05/30/2019	ND					

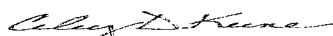
Surrogate: 1-Chlorooctane 98.2 % 41-142

Surrogate: 1-Chlorooctadecane 100 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

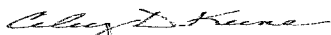
Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

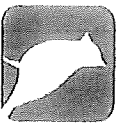
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(575) 393-2326 FAX (575) 393-2476

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