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TALON

Remediation and Closure Report

Sirius 17 Fed #6H API # 30-015-41761 NRM2002843138 Talon Project #700794.302.01

Prepared For:

Devon Energy Production Company 6488 Seven Rivers Hwy Artesia, NM 88210

Prepared By:

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

February 24, 2020

Mr. Mike Bratcher **NMOCD District 2** 811 S. 1st Street Artesia, NM 88210

Subject:

Remediation and Closure Report

Sirius 17 Fed #6H API # 30-015-41761 NRM2002843138

Dear Mr. Bratcher,

Devon Energy Production Company (Devon Energy) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above-referenced location. The incident descriptions, soil sampling results, remedial actions, and closure requests are presented herein.

Site Information

The Sirius 17 Fed #6H is located approximately twenty-six (26) miles northeast of Carlsbad, New Mexico. The legal location for this release is Unit Letter H, Section 17, Township 19 South and Range 31 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.66301 North and -103.8837 West. A Site Map 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 Wink loamy fine sand, 0 to 3 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Holocene to middle Pleistocene in age and is comprised of alluviam and piedmont deposits. Drainage courses in this area are well-drained.

Ground Water and Site Ranking

The New Mexico Office of the State Engineer Database indicates the nearest reported depth to groundwater is 140-feet below ground surface (BGS). See Appendix II for the referenced groundwater depth. This site is located within a low potential Karst area.

If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to the groundwater in Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29 NMAC.

| Approximate Depth to | Groundwater 140 Feet/BG |
|----------------------|---|
| □Yes ⊠No | Within 300 feet of any continuously flowing watercourse or any other significant watercourse |
| ∐Yes ⊠No | Within 200 feet of any lakebed, sinkhole or a playa lake |
| □Yes ⊠No | Within 300 feet from an occupied permanent residence, school, hospital, institution or church |
| □Yes ⊠No | Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes |
| □Yes ⊠No | Within 1000 feet of any freshwater well or spring |
| □Yes ⊠No | Within incorporated municipal boundaries or within a defined municipal freshwater well field covered under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978 |
| ∐Yes ⊠No | Within 300 feet of a wetland |
| ∐Yes ⊠No | Within the area overlying a subsurface mine |
| □Yes ⊠No | Within an unstable area |
| □Yes ⊠No | Within a 100-year floodplain |

| Table I Closure Criteria for Soils Impacted by a Release | | | | | | | |
|---|--------------------------------------|--|-----------------------------|--|--|--|--|
| Depth below horizontal extents of release to ground water less than 10,000 mg/l TDS | Constituent | Method* | Limit** | | | | |
| >100 feet | Total Chlorides*** TPH (GRO+DRO+MRO) | EPA 300.0 or SM4500 CI B EPA SW-846 Method 8015M | 20,000 mg/kg 2,500 mg/kg | | | | |
| | GRO+DRO BTEX | EPA SW-846 Method 8015M EPA SW-846 Method 8021B or 8260B | 1,000 mg/kg 50 mg/kg | | | | |
| | Benzene | EPA SW-846 Method 8021B or 8260B | 10 mg/kg | | | | |

Incident Descriptions

On November 24, 2020, a release occurred a 1" nipple of the pumping T developed a pinhole releasing 3 barrels (bbls) of oil and 10 bbls of produced water. The spill area remained on location. Vac trucks were dispatched to the site to recover the spilled fluids and were able to recover 0.5 bbls of oil and 1.5 bbls of produced water. A site map is presented in Appendix I. The initial C-141 is attached in Appendix III.

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

Soil Sampling

2-6-20 Background Sample Laboratory Results

| | Sample | Depth | BTEX | Benzene | GRO | DRO | MRO | Total TPH | Cl |
|-----------|---------------|------------|----------|----------|---------|------------|-------|-------------|--------|
| Sample ID | Date | (BGS) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| NMOCDT | able 1 Closur | e Criteria | FO // | 10 // | DRO+GRO | combined = | | 2500 mg/kg | 20,000 |
| 1 | 9.15.29 NMA | С | 50 mg/kg | 10 mg/kg | 1000 | mg/kg | | 2500 Hig/kg | mg/kg |
| S-1 | 2/6/2020 | 0-1' R | ND | ND | ND | 65.4 | 31.4 | 96.8 | 4760 |
| S-2 | 2/6/2020 | 0-1' R | ND | ND | ND | 48.4 | 24.8 | 73.2 | 10600 |
| S-3 | 2/6/2020 | 0-1' R | ND | ND | 15.2 | 159 | 22.3 | 196.5 | 17800 |
| S-4 | 2/6/2020 | 0-1' R | ND | ND | ND | 39.7 | 20.8 | 60.5 | 4930 |
| S-5 | 2/6/2020 | 0-1' R | ND | ND | 17.3 | 43.8 | 19.3 | 80.4 | 3270 |

ND-Analyte Not Detected

See Appendix V for the complete report of laboratory results.

Remedial Actions

- The spill area on location was scraped up, removing the staining.
- All removed soil was transported to Lea Land, LLC, an NMOCD approved soil waste disposal facility.
- The excavated area was backfilled with clean caliche, machine compacted and contoured to match the surrounding location.
- Final C-141 is attached in Appendix IV

Received by OCD: 4/27/2020 9:22:28 AM

Closure

Based on this site characterization and analytical results, we request that no further actions be required and that closure with regard to all attached incidents be granted.

Should you have any questions or if further information is required, please do not hesitate to contact our office at 575-746-8768.

Respectfully submitted,

TALON/LPE

Chris Jones
Project Manager

Attachments:

Appendix I Site Map, Karst Map, TOPO Map & Locator Map Appendix II Groundwater Data, FEMA Flood Zone, Soil Survey

Appendix III Initial and Final C-141's Appendix IV Photographic Documentation

Appendix V Laboratory Results





<u>APPENDIX I</u>

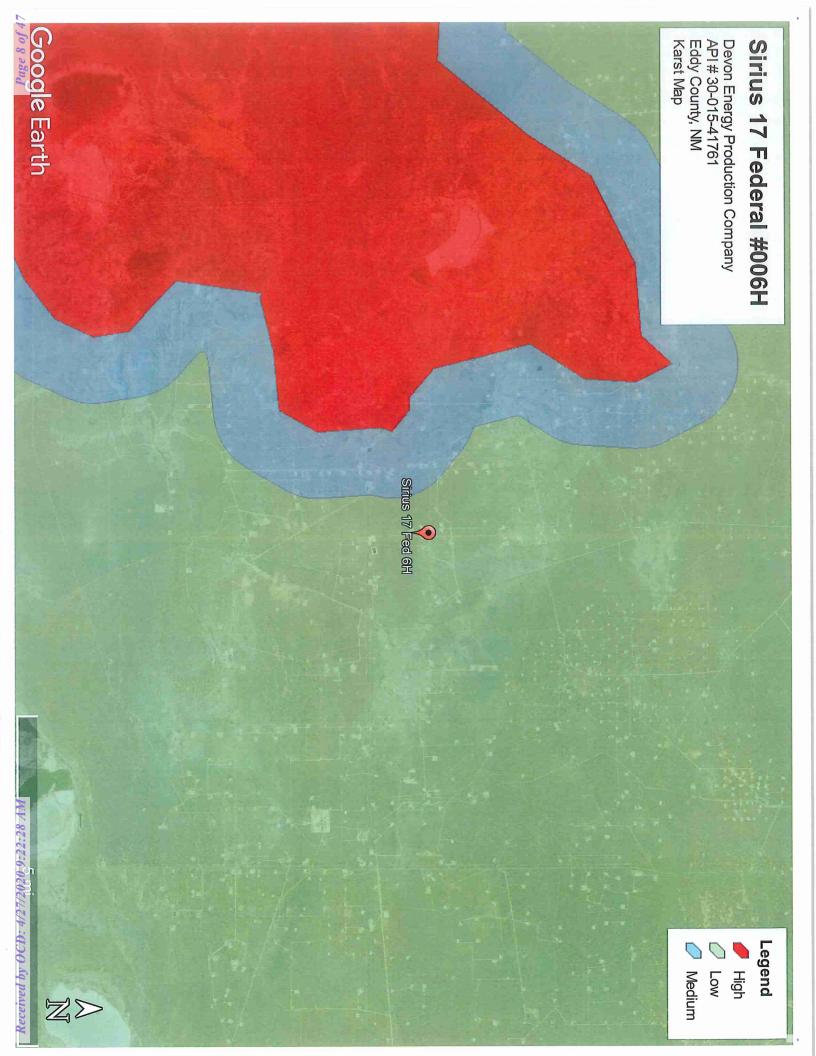
SITE MAP

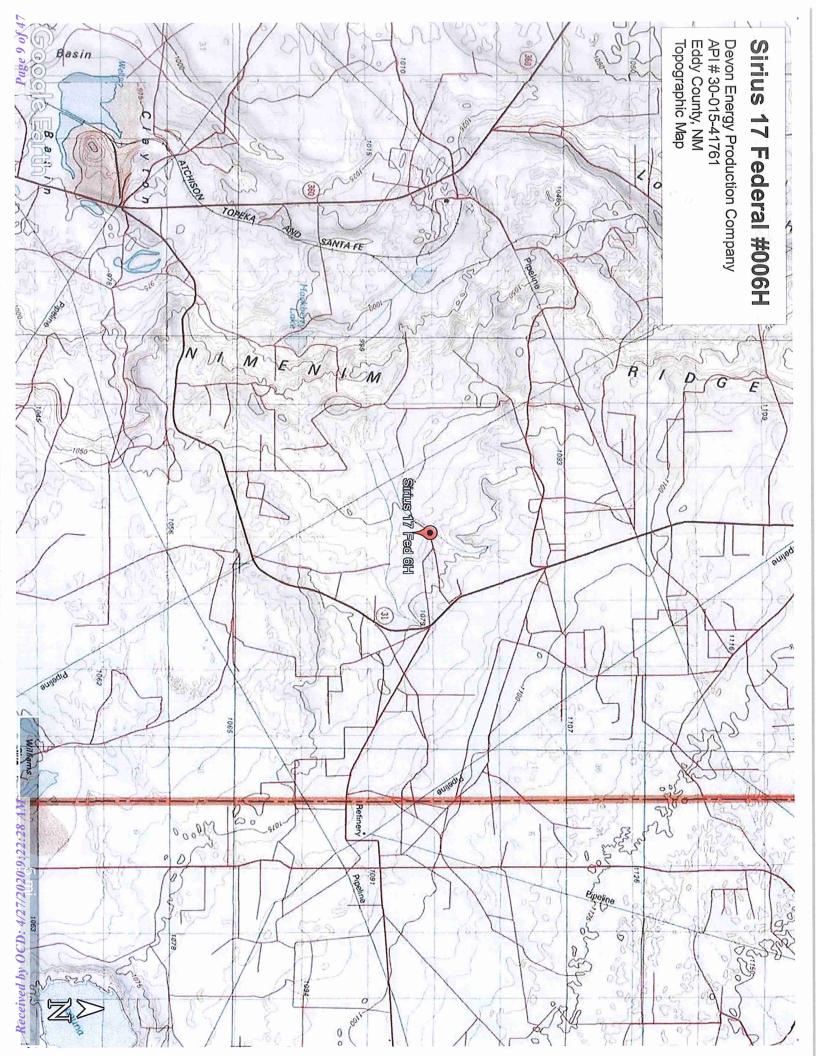
KARST MAP

TOPO MAP

LOCATOR MAP











APPENDIX II

GROUNDWATER DATA

SOIL SURVEY

FEMA FLOOD ZONE



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

(quarters

(NAD83 UTM in meters)

(In feet)

| | | POD | | _ | _ | _ | | | | | | | | , | Matau |
|-----------------------------|------|---------------------|--------------|---|---|---|------------------|-----|------------|--------------------|---------------|---------------------|--------------------|-----|------------------------|
| POD Number CP 00829 POD1 | Code | Sub- basin CP | County LE | | | 4 | Sec 16 | | Rng 31E | X 606165 | Υ 3614009* | DistanceDep 1550 | othWellDept 120 | | <i>N</i> ater olumn |
| CP 01554 POD1 | | CP | LE | 2 | 2 | 1 | 22 | 198 | 31E | 607166 | 3613354 鶅 | 2721 | 400 | | |
| CP 01554 POD2 | | CP | LE | 2 | 2 | 1 | 22 | 198 | 31E | 607165 | 3613322 🎒 | 2735 | 400 | | |
| CP 00873 POD1 | | CP | LE | | 1 | 1 | 19 | 198 | 31E | 601772 | 3613147* | 3210 | 340 | 180 | 160 |
| CP 00725 POD1 | | CP | ED | 1 | 3 | 3 | 28 | 198 | 31E | 604906 | 3610473* | 4018 | 231 | | |
| CP 00722 POD1 | | CP | LE | 4 | 3 | 3 | 28 | 198 | 31E | 605106 | 3610273* | 4232 | 200 | | |
| CP 00357 POD1 | | CP | ED | 4 | 4 | 1 | 24 | 198 | 30E | 600667 | 3612631* | 4429 | 630 | | |
| CP 00723 POD1 | | CP | ED | 2 | 1 | 1 | 33 | 198 | 31E | 605111 | 3610071* | 4434 | 139 | | |
| CP 00357 POD2 | | CP | ED | 4 | 3 | 1 | 24 | 198 | 30E | 600265 | 3612627* | 4799 | 630 | | |
| CP 00722 POD3 | | CP | LE | 2 | 4 | 1 | 33 | 198 | 31E | 605519 | 3609673* | 4883 | 220 | 140 | 80 |
| | | | | | | | | | | | | | | | |

Average Depth to Water:

160 feet 140 feet

Minimum Depth: Maximum Depth:

180 feet

Record Count: 10

UTMNAD83 Radius Search (in meters):

Easting (X): 604690

Northing (Y): 3614485.47

Radius: 5000

*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, or suitability for any particular purpose of the data.

2/10/20 9:12 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Map Unit Description: Wink loamy fine sand, 0 to 3 percent slopes, eroded---Eddy Area, New Mexico

Eddy Area, New Mexico

WK—Wink loamy fine sand, 0 to 3 percent slopes, eroded

Map Unit Setting

National map unit symbol: 1w6c Elevation: 2,700 to 5,000 feet

Mean annual precipitation: 5 to 14 inches

Mean annual air temperature: 57 to 70 degrees F

Frost-free period: 180 to 250 days

Farmland classification: Not prime farmland

Map Unit Composition

Wink and similar soils: 98 percent Minor components: 2 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

Description of Wink

Setting

Landform: Depressions, swales

Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 8 inches: loamy fine sand H2 - 8 to 38 inches: fine sandy loam H3 - 38 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High

(2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum in profile: 30 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: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A



Natural Resources
Conservation Service

Map Unit Description: Wink loamy fine sand, 0 to 3 percent slopes, eroded---Eddy Area, New Mexico

Ecological site: Loamy Sand (R042XC003NM)

Hydric soil rating: No

Minor Components

Simona

Percent of map unit: 1 percent

Ecological site: Shallow Sandy (R042XC002NM)

Hydric soil rating: No

Wink

Percent of map unit: 1 percent

Ecological site: Sandy (R042XC004NM)

Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 15, Sep 15, 2019

National Flood Hazard Layer FIRMette





AREA OF MINIMAL FLOOD HAZARD 35015006500 USGS The National Map: Orthoimagery, Data refreshed April, 2019. OTHER AREAS OF FLOOD HAZARD OTHER AREAS STRUCTURES | 1111111 Levee, Dike, or Floodwall MAP PANELS **FEATURES** GENERAL OTHER

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

SPECIAL FLOOD HAZARD AREAS

Regulatory Floodway With BFE or Depth Zone AE, AO, AH, VE, AR Without Base Flood Elevation (BFE) Zone 4, V, A99

Future Conditions 1% Annual

Levee. See Notes. Zone X Chance Flood Hazard Zone X Area with Reduced Flood Risk due to

areas of less than one square mile Zone) of 1% annual chance flood with average 0.2% Annual Chance Flood Hazard, Area

depth less than one foot or with drainag

Area with Flood Risk due to Levee Zone D

Area of Minimal Flood Hazard Zone X Effective LOMRs

Channel, Culvert, or Storm Sewer

Area of Undetermined Flood Hazard Zone

Water Surface Elevation Cross Sections with 1% Annual Chance Coastal Transect

Base Flood Elevation Line (BFE)

Profile Baseline Coastal Transect Baseline Jurisdiction Boundary Limit of Study

Hydrographic Feature

Digital Data Available

Unmapped No Digital Data Available

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

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

authoritative NFHL web services provided by FEMA. This map was exported on 2/10/2020 at 10:49:24 AM and does not become superseded by new data over time. The flood hazard information is derived directly from the time. The NFHL and effective information may change or reflect changes or amendments subsequent to this date and

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

Received by OCD: 4/27/2020 8:584:78 Add Man

78 fo 21 280 d

500

1,000

1,500

2,000 Feet

1:6,000

32°39'31.64"N



APPENDIX III

INITIAL C-141 & FINAL C-141 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 |
| Subr | nit to appropriate OCD District office |

| Incident ID | |
|----------------|--|
| District RP | |
| Facility ID | |
| Application ID | |

Release Notification

| | | | Resp | onsible Party | y | | | |
|--------------|----------------------------------|----------------------------------|-------------------------------------|-------------------------------------|---|--|--|--|
| Responsible | Party Devo | n Energy Produc | tion Company | OGRID ₆ | 137 | | | |
| Contact Nam | | | | Contact To | elephone 575-748-0176 | | | |
| Contact emai | il amanda. | davis@dvn.cor | n | Incident # | (assigned by OCD) | | | |
| Contact mail | ing address | 6488 Seven Riv | ers HWY | | | | | |
| | | | Location | of Release So | ource | | | |
| atitude 32 | .66301 | | | Longitude | -103.8837 | | | |
| | | | (NAD 83 in dec | cimal degrees to 5 decin | nal places) | | | |
| Site Name Si | | | | Site Type | Dil | | | |
| Date Release | Discovered | 11/24/2019 | | API# (if app | olicable) 30-015-41761 | | | |
| Unit Letter | Section | Township | Range | aty | | | | |
| Н | 17 | 198 | 31E | Eddy | | | | |
| Surface Owne | r: State | Federal Tr | ibal 🗌 Private (/ | Name: |) | | | |
| | | | | l Volume of l | Release | | | |
| | Materia | l(s) Released (Select al | I that apply and attach | calculations or specific | justification for the volumes provided below) | | | |
| Crude Oi | | Volume Release | | | Volume Recovered (bbls) .5 | | | |
| Produced | Water | Volume Release | d (bbls) 10 | | Volume Recovered (bbls) 1.5 | | | |
| | | | ion of total dissolwater >10,000 mg | , , | ☐ Yes ☐ No | | | |
| Condensa | ite | Volume Release | | | Volume Recovered (bbls) | | | |
| Natural C | ias | Volume Release | d (Mcf) | | Volume Recovered (Mcf) | | | |
| Other (de | scribe) | Volume/Weight | Released (provide | e units) | Volume/Weight Recovered (provide units) | | | |
| Cause of Rel | ^{ease} 1" nip locati | pple of pumpin on. See attack | g T developed | d a pin hole lea area calculatio | Ak causing fluid release. All fluid stayed or on. | | | |

| Incident ID | |
|----------------|--|
| District RP | |
| Facility ID | |
| Application ID | |

| Was this a major release as defined by | s, for what reason(s) does the resp | onsible party consider this a major release? | | | | | |
|--|--|---|--|--|--|--|--|
| 19.15.29.7(A) NMAC? | | | | | | | |
| Yes No | | | | | | | |
| | | | | | | | |
| ICATES and interesting in | and the OCD9 Providence To | When and he sale to see (the see all 1992) | | | | | |
| 11 YES, was immediate notice giv | en to the OCD? By whom? 10 v | whom? When and by what means (phone, email, etc)? | | | | | |
| | | | | | | | |
| | Initial I | Response | | | | | |
| The responsible party must | undertake the following actions immedia | tely unless they could create a safety hazard that would result in injury | | | | | |
| The source of the release has | been stopped. | | | | | | |
| The impacted area has been s | ecured to protect human health ar | nd the environment. | | | | | |
| Released materials have been | contained via the use of berms or | dikes, absorbent pads, or other containment devices. | | | | | |
| | ble materials have been removed a | | | | | | |
| If all the actions described above | • | ı why: | | | | | |
| This spill was not in conta | inment. | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | 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. | | | | | | | |
| | | e best of my knowledge and understand that pursuant to OCD rules and | | | | | |
| public health or the environment. Th | e acceptance of a C-141 report by the | otifications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have | | | | | |
| | | reat to groundwater, surface water, human health or the environment. In of responsibility for compliance with any other federal, state, or local laws | | | | | |
| and/or regulations. | | | | | | | |
| Printed Name: Kendra De | Printed Name: Kendra DeHoyos Signature: Kendra DeHoyos Date: 12/03/2019 | | | | | | |
| Signature: Nendra DeHoyas Date: 12/03/2019 | | | | | | | |
| email: kendra.dehoyos | @dvn.com | Telephone: <u>575-748-3371</u> | | | | | |
| | | | | | | | |
| OCD Only | on the second se | | | | | | |
| | | Date | | | | | |
| Received by: Date: | | | | | | | |



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? | 140 (ft bgs) | | | | | |
|--|--------------|--|--|--|--|--|
| Did this release impact groundwater or surface water? | | | | | | |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | | | | | | |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? | | | | | | |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? | ☐ Yes ⊠ 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? | ☐ Yes ⊠ No | | | | | |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? | | | | | | |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | | | | | | |
| Are the lateral extents of the release within 300 feet of a wetland? ☐ Yes ☒ | | | | | | |
| Are the lateral extents of the release overlying a subsurface mine? ☐ Yes ☒ No | | | | | | |
| Are the lateral extents of the release overlying an unstable area such as karst geology? ☐ Yes ☒ No | | | | | | |
| Are the lateral extents of the release within a 100-year floodplain? ☐ Yes ☒ No | | | | | | |
| Did the release impact areas not on an exploration, development, production, or storage site? ☐ Yes ☒ No | | | | | | |
| Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of so 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 we 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 | ells. | | | | | |

Fif 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.



| Incident ID | |
|----------------|--|
| District RP | |
| Facility ID | |
| Application ID | |

| I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release noti public health or the environment. The acceptance of a C-141 report by the C failed to adequately investigate and remediate contamination that pose a thre addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations. | fications and perform corrective actions for releases which may endanger DCD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In |
|---|--|
| Printed Name: Chris Jones | Title: Environmental Project Manager |
| Signature: | Date: 2-19-20 |
| email: cjones@talonlpe.com | Telephone: 575-746-8768 |
| | |
| OCD Only | |
| Received by: | Date: |
| | |
| | |
| | |
| | |



| Incident ID | |
|----------------|--|
| District RP | |
| Facility ID | |
| Application ID | |

Remediation Plan

| Remediation Plan Checklist: Each of the following items must be it | ncluded in the plan. |
|---|---|
| ☑ Detailed description of proposed remediation technique ☑ Scaled sitemap with GPS coordinates showing delineation points ☑ Estimated volume of material to be remediated ☑ Closure criteria is to Table 1 specifications subject to 19.15.29.120 ☑ Proposed schedule for remediation (note if remediation plan timel | |
| Deferral Requests Only: Each of the following items must be confi | rmed as part of any request for deferral of remediation. |
| Contamination must be in areas immediately under or around production. | duction equipment where remediation could cause a major facility |
| ☐ Extents of contamination must be fully delineated. | |
| Contamination does not cause an imminent risk to human health, t | he environment, or groundwater. |
| I hereby certify that the information given above is true and complete rules and regulations all operators are required to report and/or file cer which may endanger public health or the environment. The acceptance liability should their operations have failed to adequately investigate a surface water, human health or the environment. In addition, OCD ac responsibility for compliance with any other federal, state, or local law | tain release notifications and perform corrective actions for releases be of a C-141 report by the OCD does not relieve the operator of nd remediate contamination that pose a threat to groundwater, ceptance of a C-141 report does not relieve the operator of |
| Printed Name: Chris Jones | Title: Project Manager |
| Signature: | Date: 2-19-20 |
| email: cjones@talonlpe.com | Telephone: 575-746-8768 |
| OCD Only | |
| | Date: |
| Received by: Approved Approved with Attached Conditions of A | _ |
| Signature: | vate: |



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

| 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.

| Photographs of the remediated site prior to backfill or photos of must be notified 2 days prior to liner inspection) | of the liner integrity if applicable (Note: appropriate OCD District office |
|---|---|
| □ Laboratory analyses of final sampling (Note: appropriate ODC) | District office must be notified 2 days prior to final sampling) |
| Description of remediation activities | |
| | |
| and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of a | ediate contamination that pose a threat to groundwater, surface water, C-141 report does not relieve the operator of responsibility for ions. The responsible party acknowledges they must substantially ditions that existed prior to the release or their final land use in |
| email: cjones@talonlpe.com | Telephone: 575-746-8768 |
| OCD Only | |
| Received by: | Date: |
| Closure approval by the OCD does not relieve the responsible party and remediate contamination that poses a threat to groundwater, subsponsible party of compliance with any other federal, state, or local | y of liability should their operations have failed to adequately investigate urface water, human health, or the environment nor does not relieve the laws and/or regulations. |
| Closure Approved by: | Date: |
| Printed Name: | Title: |
| | |



APPENDIX IV

PHOTOGRAPHIC DOCUMENTATION

Project Completed







APPENDIX V

LABORATORY DATA



Analytical Report 651630

for

Talon LPE-Artesia

Project Manager: Chris Jones

Sirius 17 Fed 6H 700794.302.01 02.10.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

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

Xenco-Tampa: Florida (E87429), North Carolina (483)



02.10.2020

Project Manager: Chris Jones

Talon LPE-Artesia 408 West Texas St. Artesia, NM 88210

Reference: XENCO Report No(s): 651630

Sirius 17 Fed 6H

Project Address: Eddy County

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) 651630. 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. 651630 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

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 651630

Talon LPE-Artesia, Artesia, NM

Sirius 17 Fed 6H

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|------------|--------|------------------|--------------|---------------|
| S-1 0-1' R | S | 02.06.2020 14:00 | 0 - 1 ft | 651630-001 |
| S-2 0-1' R | S | 02.06.2020 14:10 | 0 - 1 ft | 651630-002 |
| S-3 0-1' R | S | 02.06.2020 14:15 | 0 - 1 ft | 651630-003 |
| S-4 0-1' R | S | 02.06.2020 14:20 | 0 - 1 ft | 651630-004 |
| S-5 0-1' R | S | 02.06.2020 14:25 | 0 - 1 ft | 651630-005 |



CASE NARRATIVE

Client Name: Talon LPE-Artesia Project Name: Sirius 17 Fed 6H

Project ID:

700794.302.01

Work Order Number(s): 651630

Report Date:

02.10.2020

Date Received: 02.06.2020

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:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3115846 BTEX by EPA 8021B

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

Batch: LBA-3115847 BTEX by EPA 8021B

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

Batch: LBA-3115992 Inorganic Anions by EPA 300/300.1

Lab Sample ID 651630-001 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: 651630-001, -002, -003, -004, -005. The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



Talon LPE-Artesia, Artesia, NM

Sirius 17 Fed 6H

Sample Id: S-1 0-1' R

Soil

Sample Depth: 0 - 1 ft

Lab Sample Id: 651630-001

Date Collected: 02.06.2020 14:00

Date Received: 02.06.2020 15:32

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method:

E300P

Analyst:

MAB

% Moist:

Matrix:

Tech:

MAB

Seq Number: 3115992

Date Prep: 02.07.2020 07:30

Prep seq: 7696192

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|-----------|---------------|--------|------|------|-------|------------------|------|------------|
| Chloride | 16887-00-6 | 4760 | 50.0 | 1.77 | mg/kg | 02.07.2020 08:45 | X | 5 |

Analytical Method: TPH by SW8015 Mod

Prep Method:

8015

Analyst:

DTH

% Moist:

Tech:

DTH

Seq Number: 3115871

Date Prep: 02.06.2020 17:30

Prep seq: 7696210

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|------------------------------------|---------------|------------|------|----------|-------|------------------|------|------------|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <14.0 | 50.3 | 14.0 | mg/kg | 02.06.2020 21:11 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | 65.4 | 50.3 | 11.5 | mg/kg | 02.06.2020 21:11 | | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | 31.4 | 50.3 | 11.5 | mg/kg | 02.06.2020 21:11 | J | 1 |
| Total TPH | PHC635 | 96.8 | | 11.5 | mg/kg | 02.06.2020 21:11 | | |
| Surrogate | | % Recovery | | Limits | Units | Analysis Dat | e | Flag |
| 1-Chlorooctane | | 103 | | 70 - 135 | % | | | |
| o-Terphenyl | | 102 | | 70 - 135 | % | | | |

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst:

MAB

% Moist:

Tech:

MAB

Seq Number: 3115846

Date Prep: 02.06.2020 17:00

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|----------------------|---------------|------------|---------|----------|-------|------------------|------|------------|
| Benzene | 71-43-2 | <0.000482 | 0.00198 | 0.000482 | mg/kg | 02.06.2020 20:35 | U | 1 |
| Toluene | 108-88-3 | < 0.000524 | 0.00198 | 0.000524 | mg/kg | 02.06.2020 20:35 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.000403 | 0.00198 | 0.000403 | mg/kg | 02.06.2020 20:35 | U | 1 |
| m p-Xylenes | 179601-23-1 | < 0.000748 | 0.00397 | 0.000748 | mg/kg | 02.06.2020 20:35 | U | 1 |
| o-Xylene | 95-47-6 | < 0.000400 | 0.00198 | 0.000400 | mg/kg | 02.06.2020 20:35 | U | 1 |
| Xylenes, Total | 1330-20-7 | < 0.000400 | | 0.000400 | mg/kg | 02.06.2020 20:35 | U | |
| Total BTEX | | <0.000400 | | 0.000400 | mg/kg | 02.06.2020 20:35 | U | |
| Surrogate | | % Recovery | | Limits | Units | Analysis Dat | e | Flag |
| 1,4-Difluorobenzene | | 112 | | 70 - 130 | % | | | |
| 4-Bromofluorobenzene | | 99 | | 70 - 130 | % | | | |



Talon LPE-Artesia, Artesia, NM

Sirius 17 Fed 6H

Sample Id:

S-2 0-1' R

Matrix:

Soil

Sample Depth: 0 - 1 ft

Lab Sample Id: 651630-002

Date Collected: 02.06.2020 14:10

Date Received: 02.06.2020 15:32

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method:

E300P

Analyst:

MAB

% Moist:

Tech:

MAB

Seq Number: 3115992

Date Prep: 02.07.2020 07:30

Prep seq: 7696192

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|-----------|---------------|--------|-----|------|-------|------------------|------|------------|
| Chloride | 16887-00-6 | 10600 | 200 | 7.09 | mg/kg | 02.07.2020 09:01 | | 20 |

Analytical Method: TPH by SW8015 Mod

Prep Method:

8015

Analyst:

DTH

% Moist:

Tech:

DTH

Seq Number: 3115871

Date Prep: 02.06.2020 17:30

Prep seq: 7696210

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|------------------------------------|---------------|------------|------|----------|-------|------------------|------|------------|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <13.9 | 50.2 | 13.9 | mg/kg | 02.06.2020 21:31 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | 48.4 | 50.2 | 11.5 | mg/kg | 02.06.2020 21:31 | J | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | 24.8 | 50.2 | 11.5 | mg/kg | 02.06.2020 21:31 | J | 1 |
| Total TPH | PHC635 | 73.2 | | 11.5 | mg/kg | 02.06.2020 21:31 | | |
| Surrogate | | % Recovery | | Limits | Units | Analysis Date | e | Flag |
| 1-Chlorooctane | | 102 | | 70 - 135 | % | | | |
| o-Terphenyl | | 99 | | 70 - 135 | % | | | |

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst:

MAB

% Moist:

Tech:

MAB

Seq Number: 3115846

Date Prep: 02.06.2020 17:00

| CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Facto |
|---------------|---|--|---|---|---|--|---|
| 71-43-2 | <0.000482 | 0.00198 | 0.000482 | mg/kg | 02.06.2020 20:55 | U | 1 |
| 108-88-3 | < 0.000524 | 0.00198 | 0.000524 | mg/kg | 02.06.2020 20:55 | U | 1 |
| 100-41-4 | < 0.000403 | 0.00198 | 0.000403 | mg/kg | 02.06.2020 20:55 | U | 1 |
| 179601-23-1 | < 0.000748 | 0.00397 | 0.000748 | mg/kg | 02.06.2020 20:55 | U | 1 |
| 95-47-6 | < 0.000400 | 0.00198 | 0.000400 | mg/kg | 02.06.2020 20:55 | U | 1 |
| 1330-20-7 | < 0.000400 | | 0.000400 | mg/kg | 02.06.2020 20:55 | U | |
| | <0.000400 | | 0.000400 | mg/kg | 02.06.2020 20:55 | U | |
| | % Recovery | | Limits | Units | Analysis Dat | te | Flag |
| | 112 | | 70 - 130 | % | | | |
| | 99 | | 70 - 130 | % | | | |
| | 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6 | Number Result 71-43-2 <0.000482 108-88-3 <0.000524 100-41-4 <0.000403 179601-23-1 <0.000748 95-47-6 <0.000400 1330-20-7 <0.000400 % Recovery 112 | Number Result MQL 71-43-2 <0.000482 | Number Result MQL SDL 71-43-2 <0.000482 | Number Result MQL SDL Units 71-43-2 <0.000482 | Number Result MQL SDL Units Date 71-43-2 <0.000482 | Number Result MQL SDL Units Date Flag 71-43-2 <0.000482 |



Talon LPE-Artesia, Artesia, NM

Sirius 17 Fed 6H

Sample Id: S-3 0-1' R Matrix:

Soil

Sample Depth: 0 - 1 ft

Lab Sample Id: 651630-003

Date Collected: 02.06.2020 14:15

Date Received: 02.06.2020 15:32

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method:

E300P

Analyst:

MAB

% Moist:

Tech:

MAB

Seq Number: 3115992

Date Prep: 02.07.2020 07:30

Prep seq: 7696192

Analysis Dil Factor CAS Flag Parameter Result MQL SDL Units Number Date 16887-00-6 17800 202 7.14 02.07.2020 09:07 Chloride mg/kg

Analytical Method: TPH by SW8015 Mod

Prep Method:

8015

Analyst:

DTH

% Moist:

Tech:

DTH

Seq Number: 3115871

Date Prep: 02.06.2020 17:30

Prep seq: 7696210

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|------------------------------------|---------------|------------|------|----------|-------|------------------|------|------------|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | 15.2 | 50.0 | 13.9 | mg/kg | 02.06.2020 21:51 | J | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | 159 | 50.0 | 11.5 | mg/kg | 02.06.2020 21:51 | | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | 22.3 | 50.0 | 11.4 | mg/kg | 02.06.2020 21:51 | J | 1 |
| Total TPH | PHC635 | 197 | | 11.4 | mg/kg | 02.06.2020 21:51 | | |
| Surrogate | | % Recovery | | Limits | Units | Analysis Date | e | Flag |
| 1-Chlorooctane | | 104 | | 70 - 135 | % | | | |
| o-Terphenyl | | 104 | | 70 - 135 | % | | | |

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst:

MAB

% Moist:

Tech:

MAB

Seq Number: 3115846

Date Prep: 02.06.2020 17:00

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|----------------------|---------------|------------|---------|----------|-------|------------------|------|------------|
| Benzene | 71-43-2 | < 0.000486 | 0.00200 | 0.000486 | mg/kg | 02.06.2020 21:16 | U | 1 |
| Toluene | 108-88-3 | < 0.000529 | 0.00200 | 0.000529 | mg/kg | 02.06.2020 21:16 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.000407 | 0.00200 | 0.000407 | mg/kg | 02.06.2020 21:16 | U | 1 |
| m p-Xylenes | 179601-23-1 | < 0.000755 | 0.00401 | 0.000755 | mg/kg | 02.06.2020 21:16 | U | 1 |
| o-Xylene | 95-47-6 | < 0.000404 | 0.00200 | 0.000404 | mg/kg | 02.06.2020 21:16 | U | 1 |
| Xylenes, Total | 1330-20-7 | < 0.000404 | | 0.000404 | mg/kg | 02.06.2020 21:16 | U | |
| Total BTEX | | <0.000404 | | 0.000404 | mg/kg | 02.06.2020 21:16 | U | |
| Surrogate | | % Recovery | | Limits | Units | Analysis Dat | æ | Flag |
| 1,4-Difluorobenzene | | 90 | | 70 - 130 | % | | | |
| 4-Bromofluorobenzene | | 99 | | 70 - 130 | % | | | |



Talon LPE-Artesia, Artesia, NM

Sirius 17 Fed 6H

Sample Id:

S-4 0-1' R

Matrix:

Soil

Sample Depth: 0 - 1 ft

Lab Sample Id: 651630-004

Date Collected: 02.06.2020 14:20

Date Received: 02.06.2020 15:32

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method:

E300P

Analyst:

MAB

% Moist:

Tech:

MAB

Seq Number: 3115992

Date Prep: 02.07.2020 07:30

Prep seq: 7696192

Dil Factor Analysis CAS Parameter Result MQL SDLUnits Flag Number Date 4930 02.07.2020 09:12 Chloride 16887-00-6 50.2 1.78 mg/kg

Analytical Method: TPH by SW8015 Mod

Prep Method: 8015

Analyst:

DTH

% Moist:

Tech:

DTH

Seq Number: 3115871

Date Prep: 02.06.2020 17:30

Prep seq: 7696210

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|------------------------------------|---------------|------------|------|----------|-------|------------------|------|------------|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <14.0 | 50.3 | 14.0 | mg/kg | 02.06.2020 21:51 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | 39.7 | 50.3 | 11.5 | mg/kg | 02.06.2020 21:51 | J | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | 20.8 | 50.3 | 11.5 | mg/kg | 02.06.2020 21:51 | J | 1 |
| Total TPH | PHC635 | 60.5 | | 11.5 | mg/kg | 02.06.2020 21:51 | | |
| Surrogate | | % Recovery | | Limits | Units | Analysis Dat | e | Flag |
| 1-Chlorooctane | | 102 | | 70 - 135 | % | | | |
| o-Terphenyl | | 100 | | 70 - 135 | % | | | |

Analytical Method: BTEX by EPA 8021

Prep Method:

Analyst:

MAB

% Moist:

Tech:

5030B MAB

Seq Number: 3115847

Date Prep: 02.06.2020 17:00

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|----------------------|---------------|------------|---------|----------|-------|------------------|------|------------|
| Benzene | 71-43-2 | <0.000485 | 0.00200 | 0.000485 | mg/kg | 02.07.2020 07:07 | U | 1 |
| Toluene | 108-88-3 | < 0.000527 | 0.00200 | 0.000527 | mg/kg | 02.07.2020 07:07 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.000405 | 0.00200 | 0.000405 | mg/kg | 02.07.2020 07:07 | U | 1 |
| m p-Xylenes | 179601-23-1 | < 0.000752 | 0.00399 | 0.000752 | mg/kg | 02.07.2020 07:07 | U | 1 |
| o-Xylene | 95-47-6 | < 0.000402 | 0.00200 | 0.000402 | mg/kg | 02.07.2020 07:07 | U | 1 |
| Xylenes, Total | 1330-20-7 | < 0.000402 | | 0.000402 | mg/kg | 02.07.2020 07:07 | U | |
| Total BTEX | | <0.000402 | | 0.000402 | mg/kg | 02.07.2020 07:07 | U | |
| Surrogate | | % Recovery | | Limits | Units | Analysis Dat | e | Flag |
| 1,4-Difluorobenzene | | 104 | | 70 - 130 | % | | | |
| 4-Bromofluorobenzene | | 121 | | 70 - 130 | % | | | |



Talon LPE-Artesia, Artesia, NM

Sirius 17 Fed 6H

Sample Id: S-5 0-1' R Matrix:

Soil

Sample Depth: 0 - 1 ft

Lab Sample Id: 651630-005

Date Collected: 02.06.2020 14:25

Date Received: 02.06.2020 15:32

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech:

MAB

Analyst: Seq Number: 3115992

MAB

% Moist:

Date Prep: 02.07.2020 07:30

Prep seq: 7696192

CAS Analysis Dil Factor Parameter Result MQL SDL Units Flag Number Date Chloride 16887-00-6 3270 50.4 1.78 mg/kg 02.07.2020 09:18

Analytical Method: TPH by SW8015 Mod

Prep Method:

8015

Analyst:

DTH

% Moist:

Tech:

DTH

Seq Number: 3115871

Date Prep: 02.06.2020 17:30

Prep seq: 7696210

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|------------------------------------|---------------|------------|------|----------|-------|------------------|------|------------|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | 17.3 | 49.8 | 13.8 | mg/kg | 02.06.2020 22:10 | J | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | 43.8 | 49.8 | 11.4 | mg/kg | 02.06.2020 22:10 | J | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | 19.3 | 49.8 | 11.4 | mg/kg | 02.06.2020 22:10 | J | 1 |
| Total TPH | PHC635 | 80.4 | | 11.4 | mg/kg | 02.06.2020 22:10 | | |
| Surrogate | | % Recovery | | Limits | Units | Analysis Dat | e | Flag |
| 1-Chlorooctane | | 112 | | 70 - 135 | % | | | |
| o-Terphenyl | | 111 | | 70 - 135 | % | | | |

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst:

MAB

% Moist:

Tech:

MAB

Seq Number: 3115847

Date Prep: 02.06.2020 17:00

Prep seq: 7696180

CAS Analysis Dil Factor SDL Flag MQL Units Parameter Result Number Date 02.07.2020 07:27 Benzene 71-43-2 < 0.000486 0.00200 0.000486 mg/kg < 0.000529 0.00200 0.000529 mg/kg 02.07.2020 07:27 U Toluene 108-88-3 < 0.000407 0.00200 0.000407 mg/kg 02.07.2020 07:27 U Ethylbenzene 100-41-4 0.000755 mg/kg U 179601-23-1 < 0.000755 0.00401 02.07.2020 07:27 1 m_p-Xylenes 0.000404 U 95-47-6 < 0.000404 0.00200 mg/kg 02.07.2020 07:27 1 o-Xylene 1330-20-7 < 0.000404 0.000404 mg/kg 02.07.2020 07:27 U Xylenes, Total Total BTEX < 0.000404 0.000404 mg/kg 02.07.2020 07:27 U Surrogate % Recovery Limits Units **Analysis Date** Flag 105 70 - 130 % 1,4-Difluorobenzene 70 - 130 % 4-Bromofluorobenzene 98



Talon LPE-Artesia, Artesia, NM

Sirius 17 Fed 6H

Sample Id:

7696136-1-BLK

Matrix:

Solid

Sample Depth:

Lab Sample Id: 7696136-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst:

MAB

% Moist:

Tech:

MAB

Seq Number: 3115846

Date Prep: 02.06.2020 13:42

Prep seq: 7696136

| | | Trep seq. | ,,0150 | | | | | |
|------------------------|---------------|------------|---------|----------|--------|------------------|------|-----------|
| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Facto |
| Benzene | 71-43-2 | < 0.000486 | 0.00200 | 0.000486 | mg/kg | 02.06.2020 11:45 | U | 1 |
| Toluene | 108-88-3 | < 0.000528 | 0.00200 | 0.000528 | mg/kg | 02.06.2020 11:45 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.000406 | 0.00200 | 0.000406 | mg/kg | 02.06.2020 11:45 | U | 1 |
| m p-Xylenes | 179601-23-1 | < 0.000754 | 0.00400 | 0.000754 | mg/kg | 02.06.2020 11:45 | U | 1 |
| o-Xylene | 95-47-6 | <0.000403 | 0.00200 | 0.000403 | mg/kg | 02.06.2020 11:45 | U | 1 |
| Surrogate | | % Recovery | | Limits | Units | Analysis Dat | e | Flag |
| 1,4-Difluorobenzene | | 110 | | 70 - 130 | % | | | |
| 4-Bromofluorobenzene | | 94 | | 70 - 130 | % | | | |
| mple Id: 7696180-1-BLK | | Matrix: | Solid | | Samp | le Depth: | | |
| a 1 11 7(0(100 1 DIT | | D-4- C-114 | | | Doto 1 | Dagaired | | |

Sa

Lab Sample Id: 7696180-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021

Prep Method:

Tech:

5030B

Analyst:

MAB

% Moist:

MAB

Seq Number: 3115847

Date Prep: 02.06.2020 17:00

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|----------------------|---------------|------------|---------|----------|-------|------------------|------|------------|
| Benzene | 71-43-2 | < 0.000486 | 0.00200 | 0.000486 | mg/kg | 02.06.2020 22:16 | U | 1 |
| Toluene | 108-88-3 | < 0.000528 | 0.00200 | 0.000528 | mg/kg | 02.06.2020 22:16 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.000406 | 0.00200 | 0.000406 | mg/kg | 02.06.2020 22:16 | U | 1 |
| m p-Xylenes | 179601-23-1 | < 0.000754 | 0.00400 | 0.000754 | mg/kg | 02.06.2020 22:16 | U | 1 |
| o-Xylene | 95-47-6 | <0.000403 | 0.00200 | 0.000403 | mg/kg | 02.06.2020 22:16 | U | 1 |
| Surrogate | | % Recovery | | Limits | Units | Analysis Dat | e | Flag |
| 1,4-Difluorobenzene | | 105 | | 70 - 130 | % | | | |
| 4-Bromofluorobenzene | | 96 | | 70 - 130 | % | | | |



Talon LPE-Artesia, Artesia, NM

Sirius 17 Fed 6H

Solid

Sample Id:

7696192-1-BLK

Matrix:

Sample Depth:

Lab Sample Id: 7696192-1-BLK

Date Collected:

Date Received:

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method:

Analyst:

MAB

% Moist:

Tech:

E300P MAB

Seq Number: 3115992

Date Prep: 02.07.2020 07:30

Prep seq: 7696192

Analysis Dil Factor CAS Flag SDL Units Result MQL Parameter Number Date 16887-00-6 < 0.354 10.0 0.354 mg/kg 02.07.2020 08:29 U Chloride

Sample Id:

7696210-1-BLK

Matrix:

Solid

Sample Depth:

Lab Sample Id: 7696210-1-BLK

Date Collected:

Date Received:

Analytical Method: TPH by SW8015 Mod

Prep Method:

% Moist:

Tech:

8015 DTH

Analyst:

DTH Seq Number: 3115871

Date Prep: 02.06.2020 17:30

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|------------------------------------|---------------|------------|------|----------|-------|------------------|------|------------|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <13.9 | 50.0 | 13.9 | mg/kg | 02.07.2020 09:46 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <11.5 | 50.0 | 11.5 | mg/kg | 02.07.2020 09:46 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <11.5 | 50.0 | 11.5 | mg/kg | 02.07.2020 09:46 | U | 1 |
| Surrogate | | % Recovery | | Limits | Units | Analysis Dat | e | Flag |
| 1-Chlorooctane | | 107 | | 70 - 135 | % | | | |
| o-Terphenyl | | 106 | | 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.
- RPD exceeded lab control limits.
- The target analyte was positively identified below the quantitation limit and above the detection limit.
- Analyte was not detected.
- 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 OA 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.

ND Not Detected.

RLReporting 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

Method Detection Limit

Non-Calculable

SMP Client Sample

BLK

Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample

BKSD/LCSD Blank Spike Duplicate/Laboratory Control Sample Duplicate

Method Duplicate/Sample Duplicate MD/SD

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



Project Name: Sirius 17 Fed 6H

Work Orders: 651630

Project ID: 700794.302.01

Lab Batch #: 3115846

Sample: 7696136-1-BLK / BLK

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 02.06.2020 11:45

SURROGATE RECOVERY STUDY

| BTEX by EPA 8021 Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1,4-Difluorobenzene | 0.0331 | 0.0300 | 110 | 70-130 | |
| 4-Bromofluorobenzene | 0.0282 | 0.0300 | 94 | 70-130 | |

Lab Batch #: 3115846

Sample: 7696136-1-BKS / BKS

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 02.06.2020 12:05

SURROGATE RECOVERY STUDY

| BTEX by EPA 8021 Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1,4-Difluorobenzene | 0.0326 | 0.0300 | 109 | 70-130 | |
| 4-Bromofluorobenzene | 0.0275 | 0.0300 | 92 | 70-130 | |

Lab Batch #: 3115846

Sample: 7696136-1-BSD / BSD

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 02.06.2020 12:26

SURROGATE RECOVERY STUDY

| BTEX by EPA 8021 Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1,4-Difluorobenzene | 0.0327 | 0.0300 | 109 | 70-130 | |
| 4-Bromofluorobenzene | 0.0277 | 0.0300 | 92 | 70-130 | |

Lab Batch #: 3115846

Sample: 651533-017 S / MS

Batch: 1 Matrix: Soil

Units:

mg/kg

Date Analyzed: 02.06.2020 12:46

SURROGATE RECOVERY STUDY

| BTEX by EPA 8021 Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1,4-Difluorobenzene | 0.0325 | 0.0300 | 108 | 70-130 | |
| 4-Bromofluorobenzene | 0.0278 | 0.0300 | 93 | 70-130 | |

Lab Batch #: 3115846

Sample: 651533-017 SD / MSD

Batch: 1 Matrix: Soil

Units:

mg/kg

Date Analyzed: 02.06.2020 13:07

SURROGATE RECOVERY STUDY

| BTEX by EPA 8021 Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1,4-Difluorobenzene | 0.0328 | 0.0300 | 109 | 70-130 | |
| 4-Bromofluorobenzene | 0.0288 | 0.0300 | 96 | 70-130 | |

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

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

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Project Name: Sirius 17 Fed 6H

Work Orders: 651630

Project ID: 700794.302.01

Lab Batch #: 3115847

Sample: 7696180-1-BLK / BLK

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 02.06.2020 22:16

SURROGATE RECOVERY STUDY

| BTEX by EPA 8021 Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1,4-Difluorobenzene | 0.0314 | 0.0300 | 105 | 70-130 | |
| 4-Bromofluorobenzene | 0.0287 | 0.0300 | 96 | 70-130 | |

Lab Batch #: 3115847

Sample: 7696180-1-BKS / BKS

Batch: 1

Matrix: Solid

Units:

mg/kg

Date Analyzed: 02.06.2020 22:36

SURROGATE RECOVERY STUDY

| BTEX by EPA 8021 Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1,4-Difluorobenzene | 0.0313 | 0.0300 | 104 | 70-130 | |
| 4-Bromofluorobenzene | 0.0287 | 0.0300 | 96 | 70-130 | |

Lab Batch #: 3115847

Sample: 7696180-1-BSD / BSD

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 02.06.2020 22:57

SURROGATE RECOVERY STUDY

| BTEX by EPA 8021 Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1,4-Difluorobenzene | 0.0314 | 0.0300 | 105 | 70-130 | |
| 4-Bromofluorobenzene | 0.0293 | 0.0300 | 98 | 70-130 | |

Lab Batch #: 3115847

Sample: 651629-001 S / MS

Batch: 1

Matrix: Soil

Units:

mg/kg

Date Analyzed: 02.06.2020 23:17

SURROGATE RECOVERY STUDY

| BTEX by EPA 8021 Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1,4-Difluorobenzene | 0.0314 | 0.0300 | 105 | 70-130 | |
| 4-Bromofluorobenzene | 0.0305 | 0.0300 | 102 | 70-130 | |

Lab Batch #: 3115847

Sample: 651629-001 SD / MSD

Batch: 1

Matrix: Soil

Units:

mg/kg

Date Analyzed: 02.06.2020 23:38

SURROGATE RECOVERY STUDY

| BTEX by EPA 8021 Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1,4-Difluorobenzene | 0.0313 | 0.0300 | 104 | 70-130 | |
| 4-Bromofluorobenzene | 0.0289 | 0.0300 | 96 | 70-130 | |

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Project Name: Sirius 17 Fed 6H

Work Orders: 651630

Project ID: 700794.302.01

Lab Batch #: 3115847

Sample: CCB / CCB

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 02.07.2020 04:23

SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1,4-Difluorobenzene | 0.0312 | 0.0300 | 104 | 70-130 | |
| 4-Bromofluorobenzene | 0.0306 | 0.0300 | 102 | 70-130 | |

Lab Batch #: 3115871

Sample: 7696210-1-BKS / BKS

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 02.06.2020 20:51

SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1-Chlorooctane | 116 | 100 | 116 | 70-135 | |
| o-Terphenyl | 52.2 | 50.0 | 104 | 70-135 | |

Lab Batch #: 3115871

Sample: 7696210-1-BSD / BSD

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 02.06.2020 20:51

SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1-Chlorooctane | 125 | 100 | 125 | 70-135 | |
| o-Terphenyl | 54.9 | 50.0 | 110 | 70-135 | |

Lab Batch #: 3115871

Sample: 651630-001 S / MS

Batch: 1 Matrix: Soil

Units:

mg/kg

Date Analyzed: 02.06.2020 21:11

SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1-Chlorooctane | 127 | 101 | 126 | 70-135 | |
| o-Terphenyl | 58.3 | 50.3 | 116 | 70-135 | |

Lab Batch #: 3115871

Sample: 651630-001 SD / MSD

Batch: 1 Matrix: Soil

Units:

mg/kg

Date Analyzed: 02.06.2020 21:31

SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1-Chlorooctane | 122 | 99.7 | 122 | 70-135 | |
| o-Terphenyl | 61.5 | 49.9 | 123 | 70-135 | |

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

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

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Project Name: Sirius 17 Fed 6H

Work Orders: 651630

Project ID: 700794.302.01

Lab Batch #: 3115871

Sample: 7696210-1-BLK / BLK

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 02.07.2020 09:46

SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-----------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| 1-Chlorooctane | 107 | 100 | 107 | 70-135 | |
| o-Terphenyl | 52.8 | 50.0 | 106 | 70-135 | |

Surrogate Recovery [D] = 100 * A / B

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

^{*} Surrogate outside of Laboratory QC limits

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution

BS / BSD Recoveries

Project Name: Sirius 17 Fed 6H

Work Order #: 651630

MAB Analyst:

Date Prepared: 02.06.2020

Date Analyzed: 02.06.2020

Project ID: 700794.302.01

Sample: 7696136-1-BKS Lab Batch ID: 3115846

Batch #: 1

Matrix: Solid

mg/kg Units:

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

| BTEX by EPA 8021 | Blank | Spike | Blank | Blank | Spike | Blank | Blk. Spk | 4 | Control | Control | Ē |
|------------------|----------------------|--------------|----------------------------------|-------------|-------|--------------------|------------|------------|---------------------------|----------------|------|
| s | Sample Result [A] | Added | Spike Result | Spike %R | Added | Spike Duplicate | Dup. %R | KPD % | Limits %R | Limits %RPD | Flag |
| Analytes | • | [B] | <u>C</u> | [0] | [E] | Result [F] | [5] | 10,000,000 | | | |
| Benzene | <0.000486 | 0.100 | 0.124 | 124 | 0.100 | 0.123 | 123 | Ι | 70-130 | 35 | |
| Toluene | <0.000528 | 0.100 | 0.114 | 114 | 0.100 | 0.113 | 113 | | 70-130 | 35 | |
| Ethylbenzene | <0.000406 | 0.100 | 0.110 | 110 | 0.100 | 0.110 | 110 | 0 | 71-129 | 35 | |
| m_p-Xylenes | <0.000754 | 0.200 | 0.217 | 109 | 0.200 | 0.215 | 108 | 1 | 70-135 | 35 | |
| o-Xylene | <0.000403 | 0.100 | 0.108 | 108 | 0.100 | 0.107 | 107 | 1 | 71-133 | 35 | |
| Analyst: MAB | ũ | ate Prepar | Date Prepared: 02.06.2020 | 20 | | | Date A | nalyzed: (| Date Analyzed: 02.06.2020 | | |

Lab Batch ID: 3115847

mg/kg

Units:

Date Prepared: 02.06.2020 Sample: 7696180-1-BKS

Batch #: 1

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY Matrix: Solid

| (B) (C) (D) (D) (D) (D) (D) (D) (D) (D) (D) (D | [C] 0.108 | <u>[a</u> | Added | Spike Duplicate | Dup. %R | RPD | Limits %R | Control Limits %RPD | Flag |
|---|--------------|-----------|-------|--------------------|------------|-----|-----------|---------------------------|------|
| <0.000486 0.100 0.108 108 <0.000528 0.100 0.104 104 | 0.108 | | [E] | Result [F] | [5] | | | | |
| <0.000528 0.100 0.104 104 | | 108 | 0.100 | 0.110 | 110 | 2 | 70-130 | 35 | |
| 3 4 4 4 4 | 0.104 | 104 | 0.100 | 0.105 | 105 | 1 | 70-130 | 35 | - |
| 100 | 9660.0 | 100 | 0.100 | 0.101 | 101 | 1 | 71-129 | 35 | |
| m_p-Xylenes <0.000754 0.200 0.204 102 0.20 | 0.204 | 102 | 0.200 | 0.209 | 105 | 2 | 70-135 | 35 | |
| o-Xylene <0.000403 0.100 0.103 103 0.10 | 0.103 | 103 | 0.100 | 0.105 | 105 | 2 | 71-133 | 35 | |

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

BS / BSD Recoveries

Project Name: Sirius 17 Fed 6H

Work Order #: 651630

MAB Analyst:

Date Prepared: 02.07.2020

Batch #: 1

Project ID: 700794.302.01

Date Analyzed: 02.07.2020

Sample: 7696192-1-BKS Lab Batch ID: 3115992

Units:

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

| Inorganic Anions by FPA 300/300.1 | Blank | Spike | Blank | Blank | Spike | Blank | Blk. Spk | | Control | Control | |
|-----------------------------------|--|--------------|-------------|-----------|-------|------------|------------|-----|---------|---------|------|
| morganic randus by at it 500/500: | Sample Result | Added | Spike | Spike | Added | Spike | Dup. | RPD | Limits | Limits | Flag |
| | [<u>A</u>] | | Result | %R | | Duplicate | %R | % | %R | %RPD | |
| Analytes | | [B] | <u>[C</u>] | <u>[a</u> | [E] | Result [F] | <u>[5]</u> | | | | |
| Chloride | <0.354 | 250 | 251 | 100 | 250 | 250 | 100 | 0 | 90-110 | 20 | |
| | The state of the s | , manual 1 | | | | | | | | | |

Sample: 7696210-1-BKS DTH Analyst:

Lab Batch ID: 3115871

Date Prepared: 02.06.2020 Batch #: 1

Date Analyzed: 02.06.2020 Matrix: Solid

> mg/kg Units:

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

| TPH by SW8015 Mod | Blank Sample Result | Spike Added | Blank Spike Result | Blank Spike %R | Spike Added | Blank Spike Duplicate | Blk. Spk Dup. %R | RPD | Control Limits %R | Control Limits %RPD | Flag |
|-----------------------------------|------------------------|----------------|--------------------------|----------------------|----------------|-----------------------------|------------------------|-----|-------------------------|---------------------------|------|
| Analytes | ₫. | [8] | [c] | [0] | 圄 | Result [F] | 5 | | | | |
| Gasoline Range Hydrocarbons (GRO) | <13.9 | 1000 | 1060 | 106 | 1000 | 1140 | 114 | 7 | 70-135 | 35 | |
| Diesel Range Organics (DRO) | <11.5 | 1000 | 896 | 6 | 1000 | 586 | 66 | 2 | 70-135 | 35 | |

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

Form 3 - MS / MSD Recoveries

Project Name: Sirius 17 Fed 6H

651630 Work Order #: Lab Batch ID:

3115846

651533-017 S QC- Sample ID:

Batch #:

700794.302.01 Project ID:

Matrix: Soil

02.06.2020 mg/kg Reporting Units: Date Analyzed:

02.06.2020 Date Prepared:

Analyst: MAB

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

| A had been all a | 1000 | Parent | | Spiked Sample | Spiked | | | Spiked | | Control | Control | |
|---------------------------|------------------|----------------|--------------|---------------|-----------|----------------|-----------------------------|------------|-----|--------------|-------------|------|
| BTEX b | BTEX by EPA 8021 | Sample | Spike | Result | Sample %R | Spike Added | Spiked Sample Result [F] | Dup. %R | RPD | Limits %R | Limits %RPD | Flag |
| Analytes | ytes | [A] | | <u>.</u> | <u>[</u> | (E) | | <u>5</u> | | | | |
| Benzene | | <0.000485 | 0.0998 | 0.129 | 129 | 0.101 | 0.117 | 116 | 10 | 70-130 | 35 | |
| Toluene | | <0.000527 | 8660.0 | 0.118 | 118 | 0.101 | 0.107 | 106 | 10 | 70-130 | 35 | |
| Ethylbenzene | | <0.000405 | 8660.0 | 0.114 | 114 | 0.101 | 0.102 | 101 | | 71-129 | 35 | |
| m p-Xylenes | | <0.000752 | 0.200 | 0.223 | 112 | 0.202 | 0.200 | 66 | 11 | 70-135 | 35 | |
| o-Xylene | | <0.000402 | 0.0998 | 0.111 | 111 | 0.101 | 0.100 | 66 | 10 | 71-133 | 35 | |
| Lab Batch ID: 3115847 | -50 | QC- Sample ID: | 651629-001 S | .001 S | Bat | Batch #: | 1 Matrix: Soil | : Soil | | | | |
| Date Analyzed: 02.06.2020 | | Date Prepared: | 02.06.2020 | 020 | An | Analyst: MAB | IAB | | | | | |
| Reporting Units: mg/kg | | | | | | | | | | | | |

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

| 1000 tall transa | Parent | | Spiked Sample | Spiked | | Duplicate | Spiked | | Control | Control | |
|------------------|------------|--------------|---------------|-----------|--------------|---------------|-----------|-----|---------|---------|------|
| BTEX by EPA 8021 | Sample | Spike | Result | Sample | Spike | Spiked Sample | Dup. | RPD | Limits | Limits | Flag |
| Analytes | Result [A] | Added [B] | [2] | %R [D] | Addec [E] | Result [F] | %R [G] | % | %R | %RPD | |
| Benzene | <0.000485 | 0.0998 | 0.111 | 111 | 0.0990 | 0.104 | 105 | 7 | 70-130 | 35 | |
| Toluene | <0.000527 | 8660.0 | 0.104 | 104 | 0.0990 | 0.0985 | 66 | 5 | 70-130 | 35 | |
| Ethylbenzene | <0.000405 | 0.0998 | 0.0982 | 86 | 0.0990 | 0.0932 | 94 | 5 | 71-129 | 35 | |
| m p-Xylenes | <0.000752 | 0.200 | 0.200 | 100 | 0.198 | 0,191 | 96 | 5 | 70-135 | 35 | |
| o-Xvlene | <0.000402 | 0.0998 | 0.101 | 101 | 0.0990 | 0.0961 | 76 | 5 | 71-133 | 35 | |

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

Matrix Spike Duplicate Percent Recovery [G] = 100*(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: Sirius 17 Fed 6H

3115992 651630 Work Order #: Lab Batch ID:

QC-Sample ID: 651630-001 S

Project ID:

700794.302.01

Matrix: Soil Batch #:

> 02.07.2020 mg/kg Reporting Units: Date Analyzed:

Analyst: MAB 02.07.2020 Date Prepared:

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

| + 000/000 + CEL 1 | Parent | | Spiked Sample | Spiked | | Duplicate | Spiked | | Control | Control | |
|-----------------------------------|--------|-------|---------------|----------|-------|---------------|--------|-----|---------|---------|------|
| Inorganic Anions by EFA 500/500.1 | Sample | Spike | Result | Sample | | Spiked Sample | Dup. | RPD | Limits | Limits | Flag |
| | Result | Added | <u>D</u> | %R | Added | Result [F] | %R | % | %R | %RPD | |
| Analytes | [v] | [B] | | <u>a</u> | | | [5] | | | | |
| | | | | | | | | | | | |
| Chloride | 4760 | 200 | 4920 | 80 | 200 | 4920 | 80 | 0 | 90-110 | 20 | × |

QC-Sample ID: 651666-006 S 02.07.2020 3115992 Date Analyzed: Lab Batch ID:

Reporting Units:

Date Prepared:

Analyst: MAB 02.07.2020

Matrix: Soil

Batch #:

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

| Inorga | Increanic Anions by FPA 300/300 1 | Parent | | Spiked Sample | Spiked | | Duplicate | Spiked | , s | Control | Control | F |
|----------------|-----------------------------------|----------------------------|----------------|---------------|--------------|-----------|-----------------------------|------------|----------|--------------|---------|------|
| re rour | | Sample Result | Spike Added | Result Sample | Sample %R | Spike | Spiked Sample Result [F] | Dup. %R | KFD % | Limits %R | %RPD | riag |
| | Analytes | [v] | | 1 | [<u>a</u>] | Œ | | <u>5</u> | | | | 1001 |
| Chloride | | 290 | 200 | 495 | 103 | 198 | 490 | 101 | - | 90-110 | 20 | |
| Lab Batch ID: | 3115871 | QC-Sample ID: 651630-001 S | 651630- | 001 S | Bat | Satch #: | 1 Matrix: | : Soil | | | | |
| Date Analyzed: | 02.06.2020 | Date Prepared: | 02.06.2020 | 20 | Ans | nalyst: D | DTH | | | | | |

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

mg/kg

Reporting Units:

| Trair 1 CW/8001 5 M. A | Parent | | Spiked Sample | Spiked | | Duplicate | Spiked | • | Control | Control | |
|---|--------|-------|---------------|------------|-------|---------------|----------|-----|------------|---------|------|
| DOMESTICAL DE LA PROPERTICAL DEPUTATION DE LA PROPERTICAL DEPUTATION DE LA PROPERTICA DE LA PROPERTICA DE LA PROPERTICA | Sample | Spike | Result | Sample | Spike | Spiked Sample | Dup. | RPD | Limits | Limits | Flag |
| | Result | Added | [] | %R | 7 | Result [F] | %R | % | % R | %RPD | |
| Analytes | [¥] | [B] | | <u>[a]</u> | | | <u>ত</u> | | | | |
| Gasoline Range Hydrocarbons (GRO) | <14.0 | 1010 | 1130 | 112 | 766 | 1130 | 113 | 0 | 70-135 | 35 | |
| Diesel Range Organics (DRO) | 65.4 | 1010 | 1210 | 113 | 766 | 1050 | 66 | 14 | 70-135 | 35 | |

Matrix Spike Percent Recovery [D] = 100*(C-A)/BRelative Percent Difference RPD = 200*(C-F)/(C+F)

Matrix Spike Duplicate Percent Recovery [G] = 100*(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.

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Revised Clale 022619 Rev. 2019,1

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Chain of Custody

Work Order No: _

Houston.TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio.TX (210) 509-3334 rd,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasibad, NM (432) 70

| (1) 17: 32 × | 2/0/20 | | rail un |
|--|--|--|---|
| Time Relinquished by: (Signature) Received by: (Signature) Date/Time | Date/Time | Received by: (Signature) | Relinquished by: (Signature) Recei |
| Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated. | nt company to Xone ses or expenses in litted to Xenco, but | stitutes a valid purchase order from cilo at assume any responsibility for any los and a charge of \$5 for each sample subm | Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xonce, its affiliates and subcontractors. It assigns stan of service. Xence will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circum of xence. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xence, but not analyzed. These terms will be enforced unless |
| 1 AI 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 Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631/245.1/7470/7471:Hg | Texas 11 Al Sb 8RCRA Sb As I | 8RCRA 13PPM Texas 1 TCLP / SPLP 6010: 8RCRA | Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed |
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| Cr bsinchira | _ | 6-20 14:00 0-1 | 5-10-1 R Spil 2-6- |
| вт | Numb | is Time Depth | Sample Identification Matrix Sampled |
| Ε | | Total Containers: 5 | Sample Custody Seals: Yes (10) N/A |
| | L Col | Correction Factor: | Yes (No) NIA |
| | Γ | -co-m (r . l | Received Intact: Yes No |
| | ners | Thermometer ID | Temperature (°C): |
| HC.: | | No Wet Ice: Yes No | SAMPLE RECEIPT Temp Blank: (Yes No |
| | | Quote #: | |
| | | Due Date: | Brandon |
| None: NO | | | Eddy |
| MeOH | Code | Routine | Project Number: 700794.302.01 |
| ANALYSIS REQUEST Preservative Codes | | 6日 Turn Around | Project Name: Sir; 45 17 Fed |
| n pe . Com Deliverables: EDD | s@talon | Emails C jones @ | Phone: 575-746-8768 |
| Reporting:Level II Level III PST/UST TRARP Level IV | City, State ZIP: | 88210 city, s | City, State ZIP: Artesia, NM |
| State of Project: | Address: | Ave | W Tekas |
| Program: UST/PST PRP Brownfields RRC Superfund | Company Name: | Compa | Company Name: Talon (PE |
| Com | Bill to: (if different) | Bill to: | Project Manager: CKC; S Jones |
| Phoenix.AZ (480) 355-0900 Atlanta.GA (770) 449-8800 Tampa.FL (813) 620-2000 West Palm Beach, FL (561) 689-6701 www.xenco.com Page of | 3A (770) 449-880 | Phoenix,AZ (480) 355-0900 Atlanta. | 4 |
| 7 (432) 704-5440 | aso, (7 (2 (3) 300- | The state of the s | |

XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE-Artesia

Date/ Time Received: 02.06.2020 03.32.00 PM

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

Work Order #: 651630

Analyst:

Temperature Measuring device used: T-NM-007

Date: 02.07.2020

| Sample Receipt Checklist | | Comments |
|---|-----|----------|
| #1 *Temperature of cooler(s)? | 1 | |
| #2 *Shipping container in good condition? | Yes | |
| #3 *Samples received on ice? | Yes | |
| #4 *Custody Seals intact on shipping container/ cooler? | Yes | |
| #5 Custody Seals intact on sample bottles? | Yes | |
| #6*Custody Seals Signed and dated? | Yes | |
| #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)? | No | |
| #18 Water VOC samples have zero headspace? | N/A | |

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

Checklist reviewed by:

| · | Checklist completed by: | Elizabeth McClellan | Date: <u>02.06.2020</u> |
|---|-------------------------|---------------------|-------------------------|
| | | 4 | |

Jessica Kramer

PH Device/Lot#: