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 | NRM2016460654 |
|----------------|---------------|
| District RP | |
| Facility ID | |
| Application ID | |

Release Notification

| | | | Resp | onsible Party | У | | |
|---|-------------|-------------------|--------------------|--------------------------|--|--|--|
| Responsible | Party XTO |) Energy | | OGRID 5 | 5380 | | |
| Contact Name Kyle Littrell | | | | Contact Te | Contact Telephone 432-221-7331 | | |
| Contact emai | | trell@xtoenergy.c | om | Incident # | Incident # (assigned by OCD) | | |
| Contact mail | ing address | 522 W. Mermod | , Carlsbad, NM 88 | 3220 | | | |
| | | | | | | | |
| | | | Location | of Release So | | | |
| atitude32.1 | 39843 | | | Longitude _ | | | |
| | | | (NAD 83 in dec | cimal degrees to 5 decim | nal places) | | |
| Site Name R | Row 4 Wolve | erine SWD Riser | | Site Type F | Flow Line | | |
| Date Release | Discovered | 06/01/2020 | | API# (if app | olicable) | | |
| Unit Letter | Section | Township | Range | Coun | nty | | |
| M | 7 | 25S | 30E | | | | |
| IVI | / | 238 | 30E | Eddy | 19 | | |
| Surface Owner | r: 🗷 State | ☐ Federal ☐ Tr | ribal 🔲 Private (/ | Name: | | | |
| | | | Noture and | l Volume of I | Dologgo | | |
| | | | Nature and | i volume of r | Release | | |
| Crude Oil | | Volume Release | | calculations or specific | volume Recovered (bbls) | | |
| | | | | | | | |
| ▶ Produced | water | Volume Release | . 7 072.72 | | Volume Recovered (bbls) 15 | | |
| Is the concentration of total dissolved sol in the produced water >10,000 mg/l? | | | | ` ' | ls (TDS) Yes No | | |
| Condensa | ite | Volume Release | | 5/ 1 • | Volume Recovered (bbls) | | |
| Natural G | as | Volume Release | ed (Mcf) | | Volume Recovered (Mcf) | | |
| Other (describe) Volume/Weight Released (provide units) | | | Released (provide | e units) | Volume/Weight Recovered (provide units) | | |
| | | | | | | | |
| Cause of Rel | A 2" W | | | | k was isolated immediately and vacuum trucks een retained for remediation activities. | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Form C-141 Page 2

State of New Mexico Oil Conservation Division

| Incident ID | NRM2016460654 |
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| was this a major release? If YES, for what reason(s) does the responsible party consider this a major release? An unauthorized release of a volume, excluding gases, of 25 or more barrels. |
|--|
| 19.15.29.7(A) NMAC? |
| x Yes □ No |
| |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? |
| Yes, by Adrian Baker via email to Bratcher, Mike, EMNRD; 'Griswold, Jim, EMNRD'; 'Hamlet, Robert, EMNRD'; Mann, Ryan; Venegas, Victoria, EMNRD on Monday, June 1, 2020 3:03 PM. |
| Initial Response |
| The responsible party must undertake the following actions immediately 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 secured to protect human health and the environment. |
| Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. |
| ★ 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: |
| N/A |
| |
| |
| |
| 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: Kyle Littrell Title: SH&E Supervisor |
| Signature Date: 6-12-20 |
| - /1/2-1 |
| email: Kyle Lineell@xtbenergy.com Telephone: 432-221-7331 |
| OCD Only |
| Received by: Ramona Marcus Date: _6/12/2020 |

| Location: | Row 4 Wolverine SWD Riser | | |
|----------------|----------------------------|----------|----------|
| Spill Date: | 6/1/2020 | | |
| | Area 1 | | |
| Approximate A | rea = | 56803.50 | sq. ft. |
| Average Satura | tion (or depth) of spill = | 4.00 | inches |
| Average Porosi | ty Factor = | 0.15 | |
| | | | |
| T-1-1 D 11 | VOLUME OF LEAK | 520.84 | h. t. t. |
| Total Produced | Area 2 | 520.84 | bbis |
| Approximate A | | 441.00 | sa. ft. |
| | tion (or depth) of spill = | | inches |
| Average Porosi | ty Factor = | 0.15 | |
| | <u>4</u> | , ,,,,, | |
| | VOLUME OF LEAK | | r |
| Total Produced | Water = | 11.78 | bbls |
| | Area 3 | | |
| Approximate A | | 140.00 | sq. ft. |
| | tion (or depth) of spill = | 12.00 | inches |
| Average Porosi | ty Factor = | 0.15 | |
| | <u></u> | 1 | |
| | VOLUME OF LEAK | | |
| Total Produced | Water = | 3.74 | bbls |
| | Area 4 | | |
| Approximate A | | 6138.00 | sq. ft. |
| Average Satura | tion (or depth) of spill = | 8.00 | inches |
| Average Porosi | ty Factor = | 0.15 | |
| | | | |
| Total Produced | VOLUME OF LEAK | 109.32 | bblc |
| Total Froduced | vvd.ci – | 105.32 | Innis |
| | Area 5 | | |
| Approximate A | | 506.00 | |
| Average Satura | tion (or depth) of spill = | 24.00 | inches |
| Average Porosi | ty Factor = | 0.15 | |
| | VOLUME OF LEAV | | |
| Total Produced | VOLUME OF LEAK Water = | 27.04 | bbls |
| | | | |
| | TOTAL VOLUME OF LEAK | - | |
| Total Produced | | 672.72 | bbls |
| T-4-10 ' | TOTAL VOLUME RECOVERED | 15.00 | labi- |
| Total Produced | ı water = | 15.00 | ippis |

| | Page 4 of 520 |
|----------------|---------------|
| Incident ID | NRM2016460654 |
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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? | > 100 (ft bgs) |
|---|----------------|
| Did this release impact groundwater or surface water? | ☐ Yes X No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | ☐ Yes X 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)? | ☐ Yes ☒ No |
| 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? | ☐ Yes ☒ No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of a wetland? | ☐ Yes 🛛 No |
| 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 X No |
| Are the lateral extents of the release within a 100-year floodplain? | ☐ Yes X 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 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 man showing immeded and symfold factures subsymfold factures delimentian maintee and manifesting wells |
| 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 |
| X 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.

Received by OCD: 6/14/2021/7:35813 AMM
From C-17-1

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Oil Conservation Division

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| Incident ID | NRM2016460654 |
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| regulations all operators are required to report and/or file certain rel public health or the environment. The acceptance of a C-141 report failed to adequately investigate and remediate contamination that perfect the public health or the environment. | ete to the best of my knowledge and understand that pursuant to OCD rules and lease notifications and perform corrective actions for releases which may endanger by the OCD does not relieve the operator of liability should their operations have ose a threat to groundwater, surface water, human health or the environment. In verator of responsibility for compliance with any other federal, state, or local laws |
|---|---|
| Printed Name: Kyle Littell | Title: SH&E Supervisor |
| Signature: | Date: _6/11/20 |
| email:Kyle_Littrell@xtoenergy.com | Telephone: 432-221-7331 |
| | |
| OCD Only | |
| Received by: | Date: |

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Incident ID NRM2016460654

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: Kyle Littrell Title: Environmental Manager Signature: Date: 6/11/21 Figure 1/21 Figure 2/21-7331 |
| OCD Only |
| Received by: Chad Hensley Date: 07/13/2021 |
| 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: 07/13/2021 |
| Printed Name: Chad Hensley Title: Environmental Specialist Advanced |
| |



WSP USA

3300 North "A" Street Building 1, Unit 222 Midland, Texas 79705 432.704.5178

June 11, 2021

District II New Mexico Oil Conservation Division 811 South First Street Artesia, New Mexico 88210

Re: Variance for Closure Request

Row 4 Wolverine SWD Riser

Incident Number NRM2016460654

Eddy County, New Mexico

To Whom It May Concern:

WSP USA Inc. (WSP) on behalf of XTO Energy, Inc. (XTO), presents the following Variance for Closure Request as an update to the approved Remediation Work Plan (Work Plan) submitted on November 30, 2020 for the Row 4 Wolverine Saltwater Disposal (SWD) Riser (Site), located in Unit M, Section 7, Township 25 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The original Work Plan proposed to complete excavation and soil sampling activities for closure of Incident Number NRM2016460654 and included a variance request to leave soil exceeding the reclamation standard for chloride in-place in areas immediately adjacent to active pipelines.

The Work Plan was approved by the New Mexico Oil Conservation Division (NMOCD) on February 24, 2021. The following report describes the implementation of the excavation and soil sampling activities as outlined in the Work Plan. Based on the excavation activities, soil sample laboratory analytical results, and completion of remediation as outlined in the approved Work Plan, XTO is requesting closure for Incident Number NRM2016460654.

RELEASE BACKGROUND

On June 1, 2020, a malfunction of a 2-inch welded olet on the bottom of a pipeline riser resulted in the release of approximately 672.72 barrels (bbls) of produced water. The release occurred on the riser pad and right-of-way (ROW) located on state land operated by the New Mexico State Land Office (SLO) and flowed west into the adjacent pasture, covering approximately 73,769 square feet. The riser pad and ROW consist of numerous risers to subsurface natural gas and produced water pipelines. The risers and 12 subsurface pipelines are located within the release extent. The release extent also includes a subsurface 3-inch steel pressurized gas pipeline operated by Lucid Energy Group (Lucid) and a utility pole and aboveground electrical lines operated by Xcel Energy (Xcel).

XTO reported the release to the NMOCD immediately on June 1, 2020 via email and subsequently submitted a Release Notification and Corrective Action Form C-141 (Form C-141) on June 12, 2020. The release was assigned Incident Number NRM2016460654.



CLOSURE CRITERIA

The Work Plan detailed site characterization according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Site receptors are shown in Figure 1. Based on the site characterization, the following Closure Criteria were applied and approved in the original Work Plan:

Benzene: 10 milligrams per kilogram (mg/kg)

• Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg

 Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg

TPH: 2,500 mg/kg

Chloride: 20,000 mg/kg

Additionally, the top four feet of reclaimed surface in the affected pasture must be comprised of non-waste containing, uncontaminated earthen material exhibiting chloride concentrations below 600 mg/kg, which was applied per NMAC 19.15.29.13.D (1).

SUMMARY OF INITIAL SOIL SAMPLING ACTIVITIES AND REMEDIATION WORK PLAN

On June 5, 2020, WSP inspected the Site to evaluate the release extent and collect preliminary soil samples (SS01 through SS09) based on visual observations and information from the Form C-141. WSP personnel returned to the Site on August 17, 2020, to conduct further site assessment via delineation soil sample collection. WSP personnel advanced eight boreholes via a stainless-steel hand auger within the release extent to assess for the presence or absence of impact to soil at depth. WSP personnel returned to the Site on September 28, 2020 and October 6, 2020 to complete delineation via track hoe. WSP personnel advanced nine potholes via track hoe within the release extent to further assess for the presence or absence of impact to soil at depth.

No preliminary or delineation soil samples contained detectable concentrations of BTEX or TPH. All preliminary and delineation soil samples were compliant with the Table 1 Closure Criteria for chloride. However, the preliminary surface samples and delineation soil samples from several boreholes and all shallow pothole samples exceeded the reclamation standard for chloride. In the top 3 feet to 4 feet of the subsurface within the release extent, except in one location, soil contained chloride concentrations exceeding the reclamation standard. Below four feet bgs, chloride concentrations were compliant with the assigned Table 1 Closure Criteria and delineated to the most stringent Table 1 Closure Criteria. All previous remediation activities and soil sample analytical results can be referenced in the original report.



Based on the delineation data, XTO submitted a Remediation Work Plan on November 30, 2020 proposing to complete the following:

- Remove an estimated 10,930 cubic yards of waste-containing soil within the top 4 feet of the subsurface;
- Collect composite confirmation samples in any areas of the floor of the excavation that
 does not reach 4 feet bgs in depth. In addition, collect confirmation samples from all
 sidewalls to confirm that all waste-containing soil has been removed from the top four
 feet. The source of the release was produced water and no hydrocarbon constituents
 were observed in source samples; therefore, chloride was established as the contaminant
 of concern.
- Request a variance to leave soil in place near XTO riser equipment and multiple subsurface gas and water pipelines near the point of release; Lucid subsurface pipeline; and; aboveground electrical line and associated utility poles operated by Xcel in order to preserve the structural integrity of said equipment. XTO safety policy prohibits excavation within 2 feet of any subsurface line or aboveground production equipment and within 10 feet of the Xcel utility pole.

The Remediation Work Plan and Variance Request was approved by NMOCD on February 24, 2021 with the following conditions of approval:

- Water wells should be no further than ½ mile away from the site due to the high loss of production water. Please provide further proof of DTW or use Table 1 Closure Criteria for ground water at a depth of 50 feet or less.
- Deferral is denied at this time. The OCD requests that samples be taken to a depth that contamination amounts are under the limit near the area requesting for deferment.

XTO and NMOCD met on April 8, 2021 to discuss the Work Plan and conditions of approval. During the meeting, NMOCD indicated that it was open, in this instance, to a regional argument for depth to groundwater based on the lateral distance to the nearest water well of just over ½ mile. XTO clarified that deferral was not requested as a part of the Work Plan; however, additional delineation sampling was requested. The following sections of the report detail the regional depth to groundwater information, excavation activities, and additional delineation sampling conducted to meet NMOCD's conditions of approval.

GROUNDWATER EVALUATION

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The nearest permitted groundwater well with depth to water data is United States Geological Survey (USGS) well 320857103553301, located approximately 0.65 miles north of the Site (Figure 1). The well has a depth to groundwater of approximately 264 feet bgs and a total depth of approximately 385 feet bgs. The groundwater well is approximately 12 feet lower in elevation than the Site. In addition, there are five USGS and New Mexico Office of the State Engineer (NMOSE) wells located within a 4-mile radius of the Site and in separate directions. All of these wells have a recorded depth to groundwater of



greater than 100 feet bgs and sometimes as deep as 300 feet bgs. There are very few surface water features in the area. These characteristics indicate regional depth to water is greater than 100 feet bgs and WSP requests the NMOCD consider these facts in its own evaluation as opposed to applying its guidance that the nearest water well data be within ½ mile of the Site. The nearest water well in this instance is only 0.15 miles outside of that guidance. The referenced well records are included in Attachment 1.

REMEDIATION WORK PLAN IMPLEMENTATION

Between November 20, 2020 and January 8, 2021, WSP personnel returned to Site to oversee excavation of impacted soil in the top 4 feet of the release area. Soil was excavated as indicated by field screening activities and laboratory analytical results from the preliminary and delineation soil samples. Excavation activities were performed using track-mounted backhoe, transport vehicle, and hydrovac. The excavation occurred in the pipeline ROW and surrounding pasture. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a photo ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Photographic documentation is included in Attachment 2.

Excavation was completed in the pasture to depths ranging from 2 feet to 4 feet bgs, as indicated by field screening activities. However, excavation was limited near XTO riser equipment and multiple subsurface gas and water pipelines near the point of release; Lucid subsurface pipeline; and; aboveground electrical line and associated utility poles operated by Xcel. XTO safety policy prohibits excavation within 2 feet of any subsurface line or aboveground production equipment and within 10 feet of utility poles to preserve the integrity of said equipment. Excavation in these areas was completed to the maximum extent possible through hand shoveling and hydrovac excavation while adhering to XTO safety policy.

Following removal of impacted soil, WSP collected 5-point composite soil samples at least every 200 square feet from the sidewalls of the excavation. In addition, composite soil samples were collected in any areas of the floor of the excavation that did not reach 4 feet bgs in depth. As previously discussed with the NMOCD, WSP did not collect soil samples from the floor of the excavation if the excavation depth was greater than or equal to 4 feet in depth. Delineation samples successfully demonstrated that soil greater than 4 feet in depth met Table 1 Closure Criteria and during excavation, all waste-containing material was removed from the top 4 feet in these areas. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples SW01 through SW103 were collected from the sidewalls of the excavation from depths ranging from the ground surface to 4 feet bgs. Composite soil samples FS01 through FS17 were collected from the floor of the excavation from depths ranging from 2 feet to 3 feet bgs. The excavation extent and excavation soil sample locations are presented on Figure 2A through Figure 2C.



The excavation soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The source of the release was produced water and no hydrocarbon constituents were observed in source samples; therefore, chloride is the established contaminant of concern. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of chloride following EPA Method 300.0.

The excavation area measured approximately 47,620 square feet. A total of approximately 7,100 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico.

Additional delineation sampling was completed on January 8, 2021 to laterally delineate soil left in place near the riser equipment and utility pole. Delineation potholes, PH10 (near the utility pole), PH11, and PH12 (near the riser) were collected at depths ranging from 0.5 feet bgs to 4 feet bgs and two discrete soil samples were collected from each pothole. PH11 and PH12 were placed in locations previously discussed and approved by NMOCD during the April 8, 2021 meeting. Those samples were analyzed for chloride only.

On and April 27, 2021, PH13 through PH20 were advanced within the release extent to better confirm concentrations of hydrocarbons and chloride in soil greater than 4 feet in depth. Two delineation soil samples were collected from those potholes from depths of 4.5 feet and 5.5 feet bgs. Samples were analyzed for chloride, BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH-GRO, TPH-DRO, and TPH-ORO by EPA Method 8015M/D.

Field screening results and observations for each pothole were recorded on a lithologic/soil sampling log which are included in Attachment 3. All delineation soil sample locations are depicted on Figure 3. The delineation pothole soil samples were collected, handled, and analyzed as described above.

SOIL ANALYTICAL RESULTS

Laboratory analytical results for all excavation floor samples (FS01 through FS17) were compliant with the applied Closure Criteria and the reclamation standard of 600 mg/kg chloride. Laboratory analytical results for sidewall samples SW01 through SW24, SW28 through SW47, SW50 through SW69, SW74 through SW97, and SW100 through SW103 were compliant with the applied Closure Criteria and the reclamation standard of 600 mg/kg chloride. Sidewall samples near XTO riser equipment and multiple subsurface gas and water pipelines near the point of release (SW98 and SW99); Lucid subsurface pipeline (SW25 through SW27 and SW70 through SW73); and; aboveground electrical line and associated utility poles operated by Xcel (SW48 and SW49), were compliant with the Site Closure Criteria; however, exceeded the reclamation standard of 600 mg/kg chloride in the top 4 feet. Chloride concentrations ranged from 638 mg/kg in SW49 to



8,130 mg/kg in SW27. Additionally, the laboratory analytical results for PH10 through PH12 confirmed lateral delineation of chloride concentrations near the Xcel utility pole and XTO riser equipment to the strictest Table 1 Closure Criteria. Laboratory analytical results for PH13 through PH20 indicated soil concentrations for benzene, BTEX, TPH-GRO, TPH-DRO, TPH and chloride were in compliance with the strictest Table 1 Closure Criteria. Laboratory analytical results are summarized on Table 1 and laboratory analytical reports are included in Attachment 4.

BACKFILL ACTIVITIES

Due to the large size of the excavation and the location of the excavation in the pasture, the excavation was backfilled as soon as possible to protect wildlife and cattle. Following a review of the analytical results from the confirmation samples, the excavation was backfilled with locally procured topsoil and recontoured to match Site conditions. The area will be reseeded with Bureau of Land Management approved seed mix.

VARIANCE REQUEST

XTO has removed all soil exceeding 600 mg/kg of chloride in the top 4 feet in the pasture where it is safe to do so. However, existing active utilities in the following areas make soil removal unsafe:

- XTO riser equipment and multiple subsurface gas and water pipelines near the point of release;
- Lucid subsurface pipeline; and
- Aboveground electrical line and associated utility poles operated by Xcel.

XTO requests to leave soil in place at these locations in order to preserve the structural integrity of the above-mentioned equipment. XTO safety policy prohibits excavation within 2 feet of any subsurface line or aboveground production equipment and within 10 feet of the Xcel utility pole. Chloride impacted soil in the top 4 feet was excavated to the maximum extent possible without risking destabilization of the riser equipment, pipelines, or utility poles. Approximately 520 cubic yards of soil is left in place surrounding the equipment, assuming a maximum depth of impacts of 4 feet bgs. The areas with soil left in place are depicted on Figure 3.

WSP and XTO believe leaving the soil in place is equally protective of public health and environment. Approximately 7,100 cubic yards of waste-containing soil were excavated, which removed the bulk of the source contaminate. All remaining soil meets the Table 1 Closure Criteria applied to the Site. In addition, the total depth of impact has been defined as 4 feet bgs and the groundwater table is greater than 100 feet deep, suggesting the likelihood of chloride migrating a sufficient depth to impact groundwater is low. There are no other sensitive receptors near the release. There is no existing vegetation in the pipeline ROW near the risers or in the Lucid pipeline ROW. Vegetation near the electrical utility appears healthy and will remain in place. Photo documentation of healthy vegetation is included in Attachment 2. The risk to worker safety



associated with soil removal immediately adjacent to or under the pipelines and utility line is more significant than risk to vegetation following remediation. Based on these factors, XTO and WSP believe leaving the soil in place is protective of human health, the environment, and groundwater. As such, XTO respectfully requests a variance to leave the minimal amount of soil in place near the third-party equipment and congested riser area with no further action for this release.

If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096.

Sincerely,

WSP USA Inc.

Tacoma Morrissey

Consultant Geologist

Mouissey

Ashley L. Ager, P.G.

ashley L. ager

Managing Director, Geologist

cc: Kyle Littrell, XTO Energy

Bureau of Land Management

Attachments:

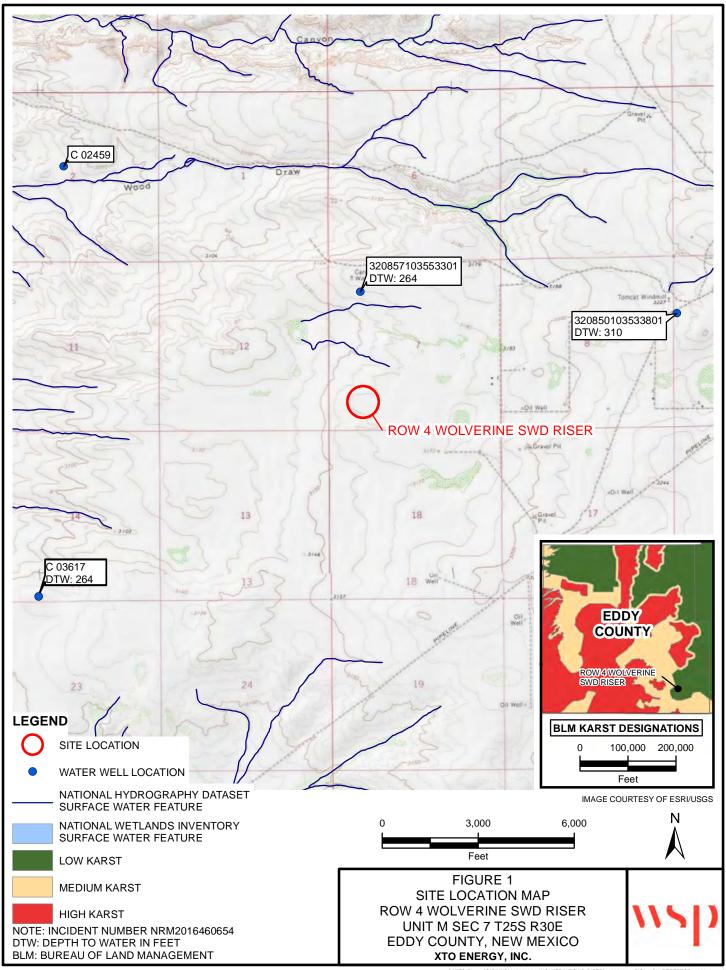
Figure 1 Site Location Map

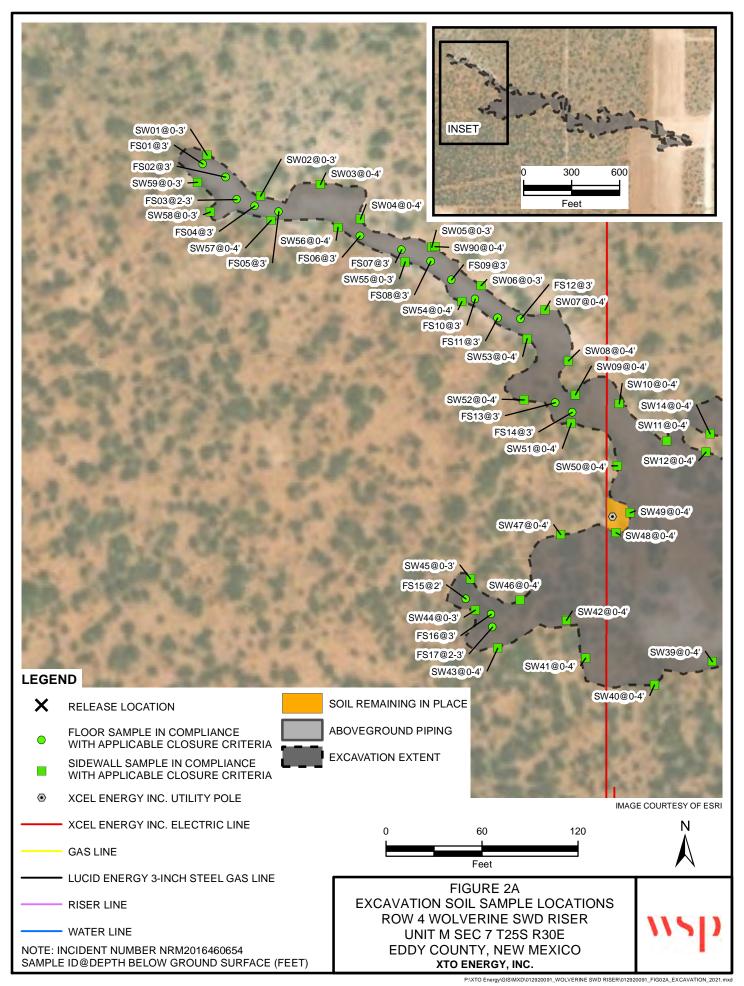
Figure 2A- Figure 2C Excavation Soil Sample Locations
Figure 3 Delineation Soil Sample Locations

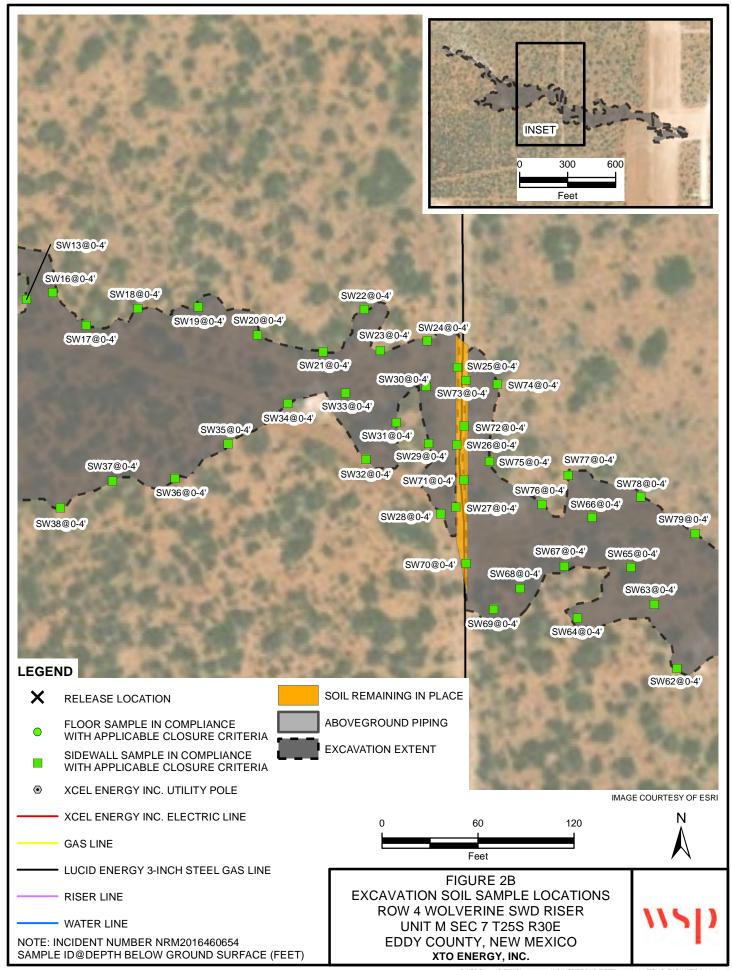
Table 1 Soil Analytical Results
Attachment 1 Referenced Well Records

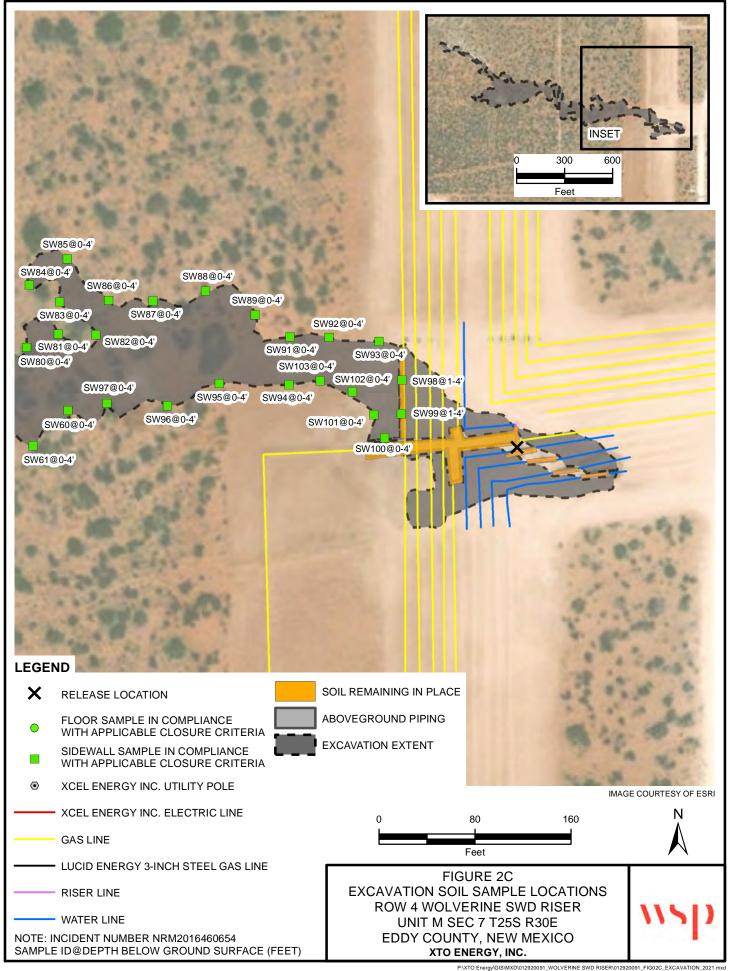
Attachment 2 Photographic Log

Attachment 3 Lithologic/Sampling Logs
Attachment 4 Laboratory Analytical Reports









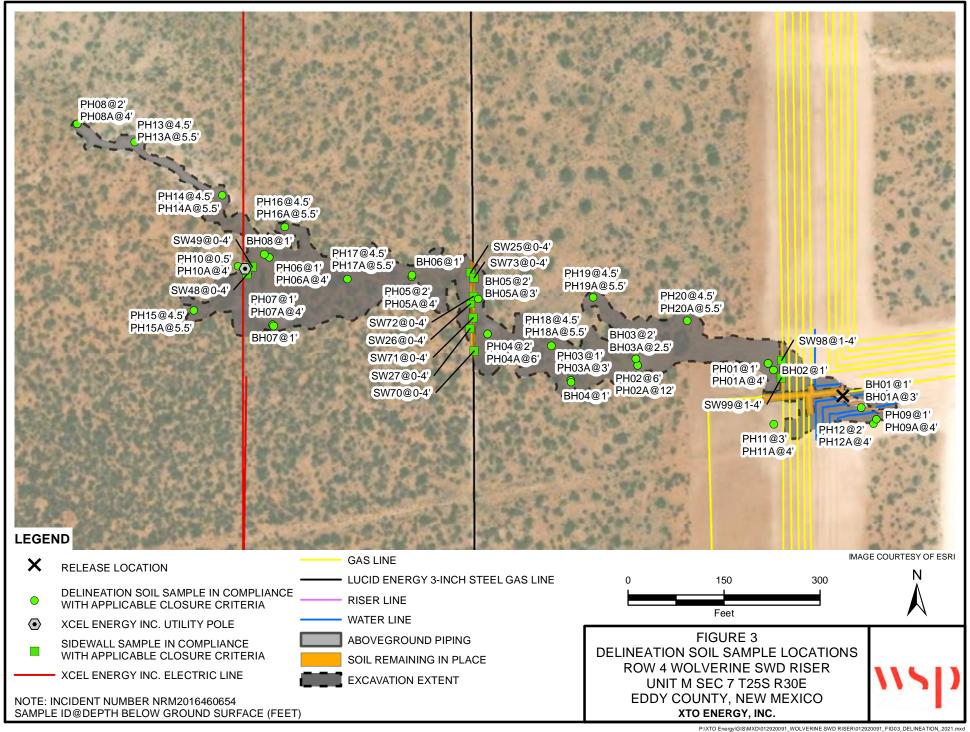


Table 1

| Sample ID | Sample Date | Sample Depth (ft bgs) | Benzene (mg/kg) | BTEX (mg/kg) | TPH-DRO (mg/kg) | TPH-GRO (mg/kg) | TPH-ORO (mg/kg) | Total GRO+DRO (mg/kg) | TPH (mg/kg) | Chloride (mg/kg) |
|--------------------|---------------------|--------------------------|--------------------|-----------------|--------------------|--------------------|--------------------|-----------------------------|-------------|---------------------|
| NMOCD Table 1 C | losure Criteria (NM | AC 19.15.29) | 10 | 50 | NE | NE | NE | 1,000 | 2,500 | 20,000 |
| Surface Samples | | | | | | | | | | |
| SS01 | 06/05/2020 | 0.5 | < 0.00200 | < 0.00200 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | 7,430 |
| SS02 | 06/05/2020 | 0.5 | < 0.00200 | < 0.00200 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | 186 |
| SS03 | 06/05/2020 | 0.5 | < 0.00200 | < 0.00200 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | 83.1 |
| SS04 | 06/05/2020 | 0.5 | < 0.00199 | < 0.00199 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 5,480 |
| SS05 | 06/05/2020 | 0.5 | < 0.00198 | < 0.00198 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 8,600 |
| SS06 | 06/05/2020 | 0.5 | < 0.00200 | < 0.00200 | < 50.2 | < 50.2 | <50.2 | <50.2 | < 50.2 | 7,250 |
| SS07 | 06/05/2020 | 0.5 | < 0.00199 | < 0.00199 | < 50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 5,350 |
| SS08 | 06/05/2020 | 0.5 | < 0.00199 | < 0.00199 | < 50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 4,770 |
| SS09 | 06/05/2020 | 0.5 | < 0.00198 | < 0.00198 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | 5,170 |
| Delineation Sample | s | | | | | | | | | |
| BH01 | 08/17/2020 | 1 | < 0.00199 | < 0.00199 | < 50.0 | < 50.0 | <50.0 | < 50.0 | < 50.0 | 4,490 |
| BH01A | 08/17/2020 | 3 | < 0.00200 | < 0.00200 | < 50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 4,500 |
| BH02 | 08/17/2020 | 1 | < 0.00200 | < 0.00200 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | 2,820 |
| BH03 | 08/17/2020 | 2 | < 0.00200 | < 0.00200 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 2,120 |
| ВН03А | 08/17/2020 | 2.5 | < 0.00201 | < 0.00201 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 1,420 |
| BH04 | 08/17/2020 | 1 | < 0.00201 | < 0.00201 | < 50.1 | < 50.1 | <50.1 | <50.1 | < 50.1 | 3,160 |
| BH05 | 08/17/2020 | 2 | < 0.00199 | < 0.00199 | < 50.2 | < 50.2 | <50.2 | <50.2 | <50.2 | 206 |
| BH05A | 08/17/2020 | 3 | < 0.00198 | < 0.00198 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 374 |
| BH06 | 08/17/2020 | 1 | < 0.00199 | < 0.00199 | < 50.1 | < 50.1 | <50.1 | <50.1 | < 50.1 | 578 |
| BH07 | 08/17/2020 | 1 | < 0.00200 | < 0.00200 | < 50.2 | < 50.2 | <50.2 | <50.2 | < 50.2 | 5,790 |
| BH08 | 08/17/2020 | 1 | < 0.00199 | < 0.00199 | <50.1 | < 50.1 | < 50.1 | <50.1 | < 50.1 | 4,130 |

Table 1

| Sample ID | Sample Date | Sample Depth (ft bgs) | Benzene (mg/kg) | BTEX (mg/kg) | TPH-DRO (mg/kg) | TPH-GRO (mg/kg) | TPH-ORO (mg/kg) | Total GRO+DRO (mg/kg) | TPH (mg/kg) | Chloride (mg/kg) |
|-----------------|----------------------|--------------------------|--------------------|-----------------|--------------------|--------------------|--------------------|-----------------------------|-------------|---------------------|
| NMOCD Table 1 C | losure Criteria (NM. | AC 19.15.29) | 10 | 50 | NE | NE | NE | 1,000 | 2,500 | 20,000 |
| Pothole Samples | | | | | | | | | | |
| PH01 | 09/28/2020 | 1 | < 0.00200 | < 0.00200 | < 50.0 | < 50.0 | <50.0 | <50.0 | <61.4 | 3,210 |
| PH01A | 09/28/2020 | 4 | < 0.00200 | < 0.00200 | <50.1 | <50.1 | <50.1 | <50.1 | <61.4 | 34.2 |
| PH02 | 09/28/2020 | 6 | < 0.00201 | < 0.00201 | <50.1 | <50.1 | <50.1 | <50.1 | <60.5 | 7,400 |
| PH02A | 09/28/2020 | 12 | < 0.00201 | < 0.00201 | <50.1 | <50.1 | <50.1 | <50.1 | <61.7 | 160 |
| PH03 | 09/28/2020 | 1 | < 0.00201 | < 0.00201 | < 50.0 | < 50.0 | <50.0 | <50.0 | <60.2 | 3,020 |
| PH03A | 09/28/2020 | 3 | < 0.00202 | < 0.00202 | < 50.1 | < 50.1 | <50.1 | < 50.1 | <63.8 | <10.0 |
| PH04 | 09/28/2020 | 2 | < 0.00198 | < 0.00198 | < 50.1 | < 50.1 | <50.1 | <50.1 | <63.8 | 5,890 |
| PH04A | 09/28/2020 | 6 | < 0.00202 | < 0.00202 | < 50.0 | < 50.0 | <50.0 | <50.0 | <62.6 | 300 |
| PH05 | 09/28/2020 | 2 | < 0.00200 | < 0.00200 | <49.9 | <49.9 | <49.9 | <49.9 | <61.4 | 4,080 |
| PH05A | 09/28/2020 | 4 | < 0.00201 | < 0.00201 | < 50.1 | <50.1 | <50.1 | <50.1 | <61.4 | 45.2 |
| PH06 | 09/28/2020 | 1 | < 0.00200 | < 0.00200 | < 50.2 | < 50.2 | <50.2 | <50.2 | <61.4 | 3,610 |
| PH06A | 09/28/2020 | 4 | < 0.00202 | < 0.00202 | < 50.2 | <50.2 | <50.2 | <50.2 | <60.5 | <9.94 |
| PH07 | 09/28/2020 | 1 | < 0.00199 | < 0.00199 | <49.9 | <49.9 | <49.9 | <49.9 | <61.7 | 4,600 |
| PH07A | 09/28/2020 | 4 | < 0.00200 | < 0.00200 | < 50.0 | <50.0 | <50.0 | <50.0 | <60.2 | 47.7 |
| PH08 | 10/06/2020 | 2 | < 0.00198 | < 0.00198 | < 50.3 | <50.3 | <50.3 | <50.3 | <63.8 | 955 |
| PH08A | 10/06/2020 | 4 | < 0.00199 | < 0.00199 | <49.8 | <49.8 | <49.8 | <49.8 | <63.8 | 112 |
| PH09 | 10/06/2020 | 1 | < 0.00201 | < 0.00201 | < 50.2 | < 50.2 | <50.2 | <50.2 | <62.6 | 2,890 |
| PH09A | 10/06/2020 | 4 | < 0.00200 | < 0.00200 | < 50.0 | <50.0 | <50.0 | <50.0 | <61.4 | 199 |
| PH10 | 01/08/2021 | 0.5 | NA | NA | NA | NA | NA | NA | NA | <10.1 |
| PH10A | 01/08/2021 | 4 | NA | NA | NA | NA | NA | NA | NA | 11.3 |
| PH11 | 01/08/2021 | 3 | NA | NA | NA | NA | NA | NA | NA | 15.3 |

Table 1

| Sample ID | Sample Date | Sample Depth (ft bgs) | Benzene (mg/kg) | BTEX (mg/kg) | TPH-DRO (mg/kg) | TPH-GRO (mg/kg) | TPH-ORO (mg/kg) | Total GRO+DRO (mg/kg) | TPH (mg/kg) | Chloride (mg/kg) |
|---------------------|---------------------|--------------------------|--------------------|-----------------|--------------------|--------------------|--------------------|-----------------------------|-------------|---------------------|
| NMOCD Table 1 C | losure Criteria (NM | AC 19.15.29) | 10 | 50 | NE | NE | NE | 1,000 | 2,500 | 20,000 |
| PH11A | 01/08/2021 | 4 | NA | NA | NA | NA | NA | NA | NA | 18.0 |
| PH12 | 01/08/2021 | 2 | NA | NA | NA | NA | NA | NA | NA | 10.1 |
| PH12A | 01/08/2021 | 4 | NA | NA | NA | NA | NA | NA | NA | <9.92 |
| PH13 | 04/27/2021 | 4.5 | < 0.00198 | < 0.00396 | 58.5 | <49.9 | <49.9 | 58.5 | 58.5 | 67.6 |
| PH13A | 04/27/2021 | 5.5 | < 0.00200 | < 0.00399 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 36.5 |
| PH14 | 04/27/2021 | 4.5 | < 0.00200 | < 0.00400 | 143 | <49.8 | <49.8 | 143 | 141 | 457 |
| PH14A | 04/27/2021 | 5.5 | < 0.00199 | < 0.00398 | 181 | <49.9 | <49.9 | 181 | 129 | 454 |
| PH15 | 04/27/2021 | 4.5 | < 0.00201 | < 0.00402 | < 50.0 | < 50.0 | <50.0 | <50.0 | < 50.0 | 50.9 |
| PH15A | 04/27/2021 | 5.5 | < 0.00200 | < 0.00401 | < 50.0 | <50.0 | <50.0 | <50.0 | < 50.0 | 65.8 |
| PH16 | 04/27/2021 | 4.5 | < 0.00200 | < 0.00401 | < 50.0 | <50.0 | <50.0 | <50.0 | < 50.0 | 409 |
| PH16A | 04/27/2021 | 5.5 | < 0.00199 | < 0.00398 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 406 |
| PH17 | 04/27/2021 | 4.5 | < 0.00200 | < 0.00400 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 239 |
| PH17A | 04/27/2021 | 5.5 | < 0.00200 | < 0.00400 | <50.0 | <50.0 | <50.0 | <50.0 | < 50.0 | 159 |
| PH18 | 04/27/2021 | 4.5 | < 0.00200 | < 0.00399 | < 50.0 | < 50.0 | <50.0 | <50.0 | < 50.0 | 170 |
| PH18A | 04/27/2021 | 5.5 | < 0.00200 | < 0.00401 | <50.0 | <50.0 | <50.0 | < 50.0 | < 50.0 | 111 |
| PH19 | 04/27/2021 | 4.5 | < 0.00202 | < 0.00404 | < 50.0 | <50.0 | <50.0 | < 50.0 | < 50.0 | 101 |
| PH19A | 04/27/2021 | 5.5 | < 0.00200 | < 0.00399 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 46.2 |
| PH20 | 04/27/2021 | 4.5 | < 0.00200 | < 0.00399 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 147 |
| PH20A | 04/27/2021 | 5.5 | < 0.00199 | < 0.00398 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 105 |
| Excavation Floor Sa | amples | | | | | | | | | |
| FS01 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 15.5 |
| FS02 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 62.5 |

Table 1

| Sample ID | Sample Date | Sample Depth (ft bgs) | Benzene (mg/kg) | BTEX (mg/kg) | TPH-DRO (mg/kg) | TPH-GRO (mg/kg) | TPH-ORO (mg/kg) | Total GRO+DRO (mg/kg) | TPH (mg/kg) | Chloride (mg/kg) |
|--------------------|---------------------|--------------------------|--------------------|-----------------|--------------------|--------------------|--------------------|-----------------------------|-------------|---------------------|
| NMOCD Table 1 C | losure Criteria (NM | AC 19.15.29) | 10 | 50 | NE | NE | NE | 1,000 | 2,500 | 20,000 |
| FS03 | 11/20/2020 | 2 - 3 | NA | NA | NA | NA | NA | NA | NA | 24.8 |
| FS04 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 49.3 |
| FS05 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 17.1 |
| FS06 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 263 |
| FS07 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 308 |
| FS08 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 185 |
| FS09 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 49.3 |
| FS10 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 452 |
| FS11 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 352 |
| FS12 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 249 |
| FS13 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 404 |
| FS14 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 441 |
| FS15 | 11/20/2020 | 2 | NA | NA | NA | NA | NA | NA | NA | 197 |
| FS16 | 11/20/2020 | 3 | NA | NA | NA | NA | NA | NA | NA | 201 |
| FS17 | 11/20/2020 | 2 - 3 | NA | NA | NA | NA | NA | NA | NA | 50.9 |
| Excavation Sidewal | l Samples | | | | | | | | | |
| SW01 | 11/24/2020 | 0 - 3 | NA | NA | NA | NA | NA | NA | NA | 40.6 |
| SW02 | 11/24/2020 | 0 - 3 | NA | NA | NA | NA | NA | NA | NA | 23.2 |
| SW03 | 12/21/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 15.8 |
| SW04 | 12/21/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 15.8 |
| SW05 | 11/24/2020 | 0 - 3 | NA | NA | NA | NA | NA | NA | NA | 832 |
| SW06 | 11/24/2020 | 0 - 3 | NA | NA | NA | NA | NA | NA | NA | 18.9 |

Table 1

| Sample ID | Sample Date | Sample Depth (ft bgs) | Benzene (mg/kg) | BTEX (mg/kg) | TPH-DRO (mg/kg) | TPH-GRO (mg/kg) | TPH-ORO (mg/kg) | Total GRO+DRO (mg/kg) | TPH (mg/kg) | Chloride (mg/kg) |
|-----------------|---------------------|--------------------------|--------------------|-----------------|--------------------|--------------------|--------------------|-----------------------------|-------------|---------------------|
| NMOCD Table 1 C | losure Criteria (NM | AC 19.15.29) | 10 | 50 | NE | NE | NE | 1,000 | 2,500 | 20,000 |
| SW07 | 12/22/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 20.1 |
| SW08 | 11/24/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 15.8 |
| SW09 | 11/24/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 111 |
| SW10 | 12/19/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | <9.96 |
| SW11 | 12/19/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 58.2 |
| SW12 | 11/24/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 462 |
| SW13 | 11/24/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 359 |
| SW14 | 11/24/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 316 |
| SW15 | 11/24/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 19.8 |
| SW16 | 11/24/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 15.2 |
| SW17 | 11/24/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 452 |
| SW18 | 12/22/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 21.2 |
| SW19 | 12/03/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 307 |
| SW20 | 12/03/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 230 |
| SW21 | 12/03/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 24.4 |
| SW22 | 12/03/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 63.8 |
| SW23 | 12/30/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 116 |
| SW24 | 12/30/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 111 |
| SW25 | 12/04/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 3,990 |
| SW26 | 12/04/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 6,960 |
| SW27 | 12/04/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 8,130 |
| SW28 | 12/22/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 73.2 |

Table 1

| Sample ID | Sample Date | Sample Depth (ft bgs) | Benzene (mg/kg) | BTEX (mg/kg) | TPH-DRO (mg/kg) | TPH-GRO (mg/kg) | TPH-ORO (mg/kg) | Total GRO+DRO (mg/kg) | TPH (mg/kg) | Chloride (mg/kg) |
|-----------------|---------------------|--------------------------|--------------------|-----------------|--------------------|--------------------|--------------------|-----------------------------|-------------|---------------------|
| NMOCD Table 1 C | losure Criteria (NM | AC 19.15.29) | 10 | 50 | NE | NE | NE | 1,000 | 2,500 | 20,000 |
| SW29 | 12/22/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 94.5 |
| SW30 | 12/04/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 543 |
| SW31 | 12/04/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 390 |
| SW32 | 12/22/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 393 |
| SW33 | 12/22/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 393 |
| SW34 | 12/04/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 204 |
| SW35 | 12/04/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | <9.98 |
| SW36 | 12/21/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 268 |
| SW37 | 12/21/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 243 |
| SW38 | 12/04/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 380 |
| SW39 | 12/04/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 18.6 |
| SW40 | 12/08/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 79.7 |
| SW41 | 12/21/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 23.8 |
| SW42 | 12/21/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 36.8 |
| SW43 | 12/08/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | <10.0 |
| SW44 | 12/08/2020 | 0 - 3 | NA | NA | NA | NA | NA | NA | NA | <10.1 |
| SW45 | 12/08/2020 | 0 - 3 | NA | NA | NA | NA | NA | NA | NA | 191 |
| SW46 | 12/08/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | <10.0 |
| SW47 | 12/08/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | <10.0 |
| SW48 | 12/08/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 638 |
| SW49 | 12/08/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 3,330 |
| SW50 | 12/21/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 176 |

Table 1

| Sample ID | Sample Date | Sample Depth (ft bgs) | Benzene (mg/kg) | BTEX (mg/kg) | TPH-DRO (mg/kg) | TPH-GRO (mg/kg) | TPH-ORO (mg/kg) | Total GRO+DRO (mg/kg) | TPH (mg/kg) | Chloride (mg/kg) |
|-----------------|----------------------|--------------------------|--------------------|-----------------|--------------------|--------------------|--------------------|-----------------------------|-------------|---------------------|
| NMOCD Table 1 C | losure Criteria (NM. | AC 19.15.29) | 10 | 50 | NE | NE | NE | 1,000 | 2,500 | 20,000 |
| SW51 | 12/08/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 130 |
| SW52 | 12/21/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 19.2 |
| SW53 | 12/21/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 18.7 |
| SW54 | 12/21/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 127 |
| SW55 | 12/08/2020 | 0 - 3 | NA | NA | NA | NA | NA | NA | NA | 407 |
| SW56 | 12/08/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 20.1 |
| SW57 | 12/08/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 104 |
| SW58 | 12/08/2020 | 0 - 3 | NA | NA | NA | NA | NA | NA | NA | <10.1 |
| SW59 | 12/08/2020 | 0 - 3 | NA | NA | NA | NA | NA | NA | NA | <10.1 |
| SW60 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 502 |
| SW61 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 231 |
| SW62 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 327 |
| SW63 | 12/30/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 95.2 |
| SW64 | 12/30/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 21.8 |
| SW65 | 12/30/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 37.7 |
| SW66 | 12/30/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 196 |
| SW67 | 12/30/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 40.0 |
| SW68 | 12/30/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 160 |
| SW69 | 12/30/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 203 |
| SW70 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 2,250 |
| SW71 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 6,220 |
| SW72 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 2,990 |

Table 1

| Sample ID | Sample Date | Sample Depth (ft bgs) | Benzene (mg/kg) | BTEX (mg/kg) | TPH-DRO (mg/kg) | TPH-GRO (mg/kg) | TPH-ORO (mg/kg) | Total GRO+DRO (mg/kg) | TPH (mg/kg) | Chloride (mg/kg) |
|-----------------|----------------------|--------------------------|--------------------|-----------------|--------------------|--------------------|--------------------|-----------------------------|-------------|---------------------|
| NMOCD Table 1 C | losure Criteria (NM. | AC 19.15.29) | 10 | 50 | NE | NE | NE | 1,000 | 2,500 | 20,000 |
| SW73 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 3,870 |
| SW74 | 12/28/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 70.8 |
| SW75 | 12/28/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 69.7 |
| SW76 | 12/28/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 58.9 |
| SW77 | 12/28/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 54.8 |
| SW78 | 12/28/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 290 |
| SW79 | 01/08/2021 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 37.8 |
| SW80 | 01/08/2021 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 201 |
| SW81 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 309 |
| SW82 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 134 |
| SW83 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 121 |
| SW84 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 13.1 |
| SW85 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 18.5 |
| SW86 | 12/09/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 83.2 |
| SW87 | 12/16/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 22.6 |
| SW88 | 12/16/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 14.4 |
| SW89 | 12/16/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 358 |
| SW90 | 12/22/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 21.8 |
| SW91 | 12/31/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 36.9 |
| SW92 | 12/31/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 62.1 |
| SW93 | 12/31/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 71.7 |
| SW94 | 12/31/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 58.2 |
| SW95 | 12/31/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 37.6 |

Table 1

| Sample ID | Sample Date | Sample Depth (ft bgs) | Benzene (mg/kg) | BTEX (mg/kg) | TPH-DRO (mg/kg) | TPH-GRO (mg/kg) | TPH-ORO (mg/kg) | Total GRO+DRO (mg/kg) | TPH (mg/kg) | Chloride (mg/kg) |
|-------------------|--------------------|--------------------------|--------------------|-----------------|--------------------|--------------------|--------------------|-----------------------------|----------------|---------------------|
| NMOCD Table 1 Clo | osure Criteria (NM | AC 19.15.29) | 10 | 50 | NE | NE | NE | 1,000 | 2,500 | 20,000 |
| SW96 | 12/31/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 18.8 |
| SW97 | 12/31/2020 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 111 |
| SW98 | 01/08/2021 | 1 - 4 | NA | NA | NA | NA | NA | NA | NA | 5,210 |
| SW99 | 01/08/2021 | 1 - 4 | NA | NA | NA | NA | NA | NA | NA | 1,470 |
| SW100 | 01/08/2021 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 73.7 |
| SW101 | 01/08/2021 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 47.9 |
| SW102 | 01/08/2021 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 214 |
| SW103 | 01/08/2021 | 0 - 4 | NA | NA | NA | NA | NA | NA | NA | 507 |

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

NA - not analyzed

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

< - indicates result is less than the stated laboratory method practical quantitation limit

NE - Not Established

BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard

Greyed data represents samples that were excavated

USGS 320857103553301 25S.30E.07.112331

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°08'57", Longitude 103°55'33" NAD27 Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 385 feet

Land surface altitude: 3,169 feet above NAVD88.

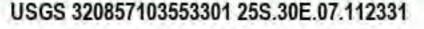
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits"

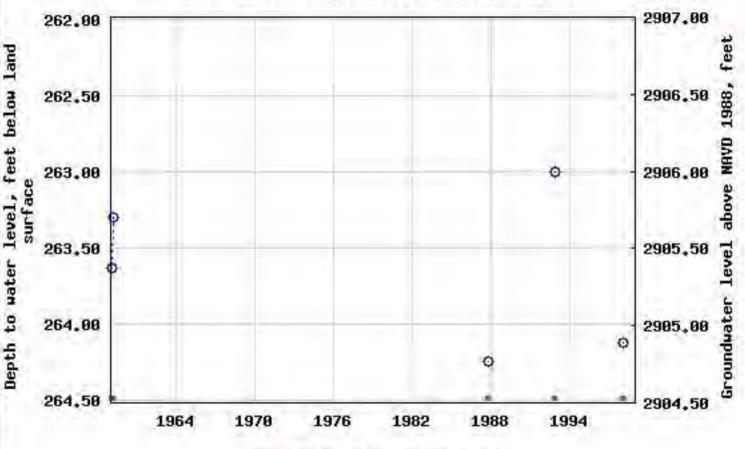
(110AVMB) local aquifer

AVAILABLE DATA:

| Data Type | Begin Date | End Date | Count |
|--------------------------------------|---------------|-----------------|----------|
| Field groundwater-level measurements | 1959-02-05 | 1998-01-28 | 5 |
| Revisions | Unavailable (| site:0) (timese | eries:0) |

1 of 1 11/12/2020, 1:26 PM





Released to Imaging: 7/13/2021 11:08:53 AM Period of approved data

Received by OCD: 6/14/202 New Mico Office of the State Enginee Page 33 of 520

Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag POD Number

Q64 Q16 Q4 Sec Tws Rng

X

C 03716 POD1

4 2 2 02

25S 30E

609069 3559211

Driller License:

1229

Driller Company:

CARTER'S WELL DRILLING

Driller Name: RICHARD CARTER

Drill Start Date:

02/05/2014

Drill Finish Date:

03/03/2014

Plug Date:

Log File Date:

03/12/2014

PCW Rcv Date:

Source: Shallow

V

Pump Type:

Pipe Discharge Size:

Estimated Yield:

50 GPM

Casing Size:

Depth Well:

600 feet

Depth Water:

425 feet

Water Bearing Stratifications:

Top Be

Bottom Description

442

600 Sandstone/Gravel/Conglomerate

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.

6/5/20 8:04 AM

POINT OF DIVERSION SUMMARY



| | PHOTOGRAPHIC LOG | |
|------------------|---------------------------|---------------|
| XTO Energy, Inc. | Row 4 Wolverine SWD Riser | NRM2016460654 |
| | Eddy County, New Mexico | |

Photo No. Date

1 November 3, 2020

Western excavation area view

Northwest.



Photo No. Date

2 December 2, 2020

Central excavation view West from near right-of-way.





| PHOTOGRAPHIC LOG | | | | | | |
|------------------|---------------------------|---------------|--|--|--|--|
| XTO Energy, Inc. | Row 4 Wolverine SWD Riser | NRM2016460654 | | | | |
| | Eddy County, New Mexico | | | | | |

| Photo No. | Date |
|------------------|--------------------|
| 3 | February 19, 2021 |
| Right-of-way exc | avation view West. |



| Photo No. | Date |
|----------------------------------|----------------|
| 4 | April 27, 2021 |
| Dalimantian at DHOO Winner Front | |

Delineation at PH20. View East.





| | PHOTOGRAPHIC LOG | |
|------------------|---------------------------|---------------|
| XTO Energy, Inc. | Row 4 Wolverine SWD Riser | NRM2016460654 |
| | Eddy County, New Mexico | |

| Photo No. | Date |
|-------------------|-------------------|
| 5 | May 14, 2021 |
| Backfill. Western | n Excavation view |
| Ea | ast. |





| | PHOTOGRAPHIC LOG | |
|------------------|---------------------------|---------------|
| XTO Energy, Inc. | Row 4 Wolverine SWD Riser | NRM2016460654 |
| | Eddy County, New Mexico | |

| Photo No. | Date | | | |
|-----------|-------------------|--|-------|---|
| 6 | May 14, 2021 | | | |
| | n Excavation view | | | |
| West from | right-of-way. | | | |
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| | | 32.14003, -103.9 Unnamed Road, | | |
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| • | 11. | 5 |) | 5 Car | WS 08 West S Isbad, Ne | P USA Stevens S w Mexico | | | H Name: ne: Row 4 Wolverine SW cident Numbe NRM2010 | | | | | |
|---------------------|---|------|------|------------|------------------------------|--------------------------------|-------|-----------|---|---------------------|--------------------|-----------------|--|--|
| | | | | | ebaa, TVC | . WONIOU | 00220 | | | | TE12920091 | | | |
| | | LITH | OLOG | SIC / SOIL | SAMPL | ING LO | G | | | By Robert M. | Method: | Hand Auger | | |
| Lat/Lo | ng: | | | | Field Scre | | | | Hole Dia | meter: | Total Depth: | - | | |
| Comm | nents: | | | | Chloride, I | PID | | | 3 inches | | 3 feet | | | |
| | | ı | | | 1 | T | | ı | | | | | | |
| Moisture Content | | | | | | | | | | Lithology/Remarks | | | | |
| | | | | | 1 | 0 | | | | | | | | |
| D | 6,137 | 2.6 | N | BH01 | 1' | 1 | ССНЕ | Light Bro | wn-tan. | Tace brown sand, sa | mall grain, poorly | sorted. No odor | | |
| D | 9,206 | 2.1 | N | | 2' | 2 | СНСЕ | Light Bro | wn-tan. | Tace brown sand, sa | mall grain, poorly | sorted. No odor | | |
| D | D 7229 2.3 N BH01A 3' 3 CCHE Light F Auger | | | | | | | | wn-tan. fusal | Tace brown sand, sa | mall grain, poorly | sorted. No odor | | |
| | | | | | _ | | | | | | | | | |
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| Lat/Lc | | LITH |) OLOG | 5 Car GIC / SOIL | 08 West S Isbad, Nev | ING LO | BH or PH Name: BH02 Site Name: Row 4 Wolveri RP or Incident Numbe NR WSP Job Number: Logged By Robert M. Hole Diameter: 3 inches | | Hand Auger | | |
|---------------------|-------|----------------|-----------|------------------------|-----------------------------|-------------------|--|--|----------------------|--------------|--|
| Moisture Content | | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | Litho | logy/Remarks | |
| M | 3,450 | 0.6 | Z | BH02 | 1' 1.5' - | - 1 | | | und grain. Brown. No | odor | |

| Lat/Lc | ong: | LITH |) oLog | 5 Car BIC / SOIL | 08 West S sbad, Ne | w Mexico | | BH or PH Name: BH03 Site Name: Row 4 V RP or Incident Num WSP Job Number: Logged By Robert N Hole Diameter: 3 inches | be NRM20164 T | | Hand Auger | |
|---------------------|-------------------|----------------|-----------|------------------------|-----------------------------|---------------|---------------------------|--|--------------------------------------|-------------|------------|--|
| Comn | nents: | | | | Officiac, | | | | 0 | | 2.0 1000 | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | (ft bgs) | USCS/Rock Symbol | | | Lithology/R | emarks | |
| М | 2,980 | 0.6 | N | | <u> </u> | 0 | SP-SM | Small, ro | und grain. Brown | . No odor | | |
| M M | 2,778 2,425 | 1.2 1 | N N | BH03 BH03A | 2' 2.5' | 2 2.5 3 | SP-SM SP-SM Auger R | Small, ro | und grain. Brown und grain. Brown | . No odor | | |
| | | | | | | | | | | | | |

| Lat/Lo | | LITH |) OLOC | 5 Car GIC / SOII | 008 West S Isbad, Ne | LING LO | | | 4 Wolverine SW Jumbe NRM2016 er: T | | Hand Auger | |
|---------------------|-------------------|----------------|-----------|------------------------|-----------------------------|-------------------|---------------------|-----------------------|--|--------------|------------|--|
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | | Lithology/R | Remarks | |
| M | 1,993 | 0.4 | N | BH04 | 1' 1.5' - | | | Small, ro Auger Ro | und grain. Bro | own. No odor | | |

| \ | ''' | Ĩ. |) | Cari | 08 West S sbad, Ne | w Mexicc | RP or Incide | Row 4 Wo ent Numb Number: | | 460654 E12920091 | | | |
|---------------------|-------------------|----------------|----------|------------|-----------------------------|--|---------------------|---------------------------------|------------------------|---------------------|------------|------------------------|------------|
| 1 - 1/1 - | | LITH | OLOG | SIC / SOIL | | | G | | Logged By | | | Method: | Hand Auger |
| Lat/Lo | ong: | | | | Field Scre Chloride, | | | | Hole Diame 3 inches | eter: | | Total Depth: 3 feet | |
| Comn | nents: | | | | | | | | | | | <u>!</u> | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | | L | ithology/R | emarks | |
| М | 480 | 0.4 | N | | 1' <u>-</u> | 0 | SP-SM | Small, ro | und grain. | Brown. | No odor | | |
| M | 828 | 0.6 | N | BH05 | 2' | _ 2 | SP-SM | Small, ro | und grain. | Brown. | No odor. | Γrace caliche | |
| M | 520 520 | 0.8 | z z | BH05A | 3' | - 2 - 3 - 3.5 | | | und grain. | | | Trace caliche | |
| | | | | | - | - - - - - - - - - - | | | | | | | |

| Lat/Lo | nents: | | | GIC / SOIL | 508 West S Isbad, Ne | LING LO eening: PID | | BH or PH Name: BH06 Site Name: Row 4 Wol RP or Incident Numbe WSP Job Number: Logged By Robert M. Hole Diameter: 3 inches | NRM2016 | | Hand Auger | |
|---------------------|-------------------|----------------|----------|------------|-------------------------|---------------------------|---------------------|---|-------------------|-----------|------------|--|
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Depth (ft bgs) | (ft bgs) | USCS/Rock Symbol | | Lit | thology/R | emarks | |
| M | 1,238 | 1.2 | N | вно6 | | 0 - 1 - 1.5 | SP-SM | Small, ro Auger Ro | und grain. Brown. | No odor | | |

| Lat/Lo | ong: | LITH |) OLOG | 5 Car GIC / SOIL | 08 West S Isbad, Ne SAMPL Field Scre | ING LO | BH or PH Name: BH07 Site Name: Row 4 Wolver RP or Incident Numbe NR WSP Job Number: Logged By Robert M. Hole Diameter: | M2016460654 TE129200 Method Total De | 091 I: Hand Auger | | |
|---------------------|--------|----------------|-----------|------------------------|---|-------------|--|---|----------------------|-------------|---|
| Comn | nents: | | | | Chloride, I | PID | | | 3 inches | 1 foot | |
| Moisture Content | | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | (ft bgs) | USCS/Rock Symbol | | Litho | logy/Remark | s |
| M | 3,450 | 0.6 | Z | BH07 | 1' | 0 - 1 - 1.5 | SP-SM | Small, ro Auger Re | und grain. Brown. No | odor | |

| Moisture Command Content | nents: | Vapor (ppm) | Staining | Samble # | 08 West S Isbad, Ne | eening: PID Depth | | BH or PH Name: BH08 Site Name: Row 4 Wolner or Incident Numbe WSP Job Number: Logged By Robert M. Hole Diameter: 3 inches | NRM20164 | Method: Total Depth: 1 foot | Hand Auger | |
|--------------------------|--------|-------------|----------|----------|------------------------|--------------------|----|---|---------------------|-----------------------------|------------|--|
| M M | 3,450 | 0.8 | Z Str | BH08 | (ft bgs) 1' | (ft bgs) 1 1.5 | SN | Small, ro Auger Ro | und grain. Brown. N | No odor | | |

| Lat/Lo | | LITH |) OLOG | 5 Carl | 08 West S sbad, Ne | W Mexico | G | | BH or PH Name: BH09 Site Name: Row 4 Wc RP or Incident Number WSP Job Number: Logged By Jeremy H. Hole Diameter: 3 inches | e NRM20164 T | | Hand Auger |
|---------------------|--|--------------------------|-----------|-----------|-----------------------------|-------------------|-------------------------|--|---|--|--|------------|
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | Li | ithology/R | emarks | |
| D | BDL 0.6 BDL 1.0 BDL 0.8 BDL 0.8 | 0.0 0.0 0.0 0.0 | Z Z Z Z | вно9 | 1' | - | SW-SM SW-SM SW-SM | No odor, Fine-cora No odor, Fine-cora No odor, Fine-cora No odor, Fine-cora | ase grain, well grade No plasticity, Organ use grain, well grade No plasticity, Organ | nics. Brow ed w/ silt ar nics. Brow ed w/ silt ar nics. Light ed w/ silt ar nics. Light ed w/ silt ar | n/red ad gravel vn/red ad gravel s Brown/red ad gravel s Brown/red ad gravel ad gravel | |

| Lat/Lo | | LITH |) OLOG | 5 Car GIC / SOIL | 08 West S sbad, Ne | W Mexico |) 88220 • G | | BH or PH Name: BH10 Site Name: Row 4 RP or Incident Nu WSP Job Number Logged By Jerem Hole Diameter: 3 inches | mbe NRM20164 :: T | | Hand Auger |
|---------------------|--|--------------------------|-----------|------------------------|-----------------------------|-------------------|-------------------------|--|---|---|---|------------|
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | | Lithology/R | emarks | |
| D D M M | BDL 0.6 BDL 0.8 BDL 0.8 BDL 0.6 | 0.1 0.0 0.0 0.0 | Z Z Z Z Z | BH10A | 0.5' | 0.5 | SW-SM SW-SM SW-SM | No odor, Fine-cora No odor, Fine-cora No odor, Fine-cora No odor, Fine-cora | ise grain, well gr. No plasticity, Or | rganics. Brow aded w/ silt ar rganics. Brow aded w/ silt ar rganics. Brow aded w/ silt ar rganics. Light aded w/ silt ar | on/red and gravel ond gravel ond gravel on/red and gravel ond gravel t Brown/red and gravel | |

| Lat/Lo Comm | nents: | | | Carl | 08 West Sample SAMPL Field Scree Chloride, I | w Mexico | 9 88220 G | | BH or PH Name: BH11 Site Name: Row 4 Wolv RP or Incident Numbe N WSP Job Number: Logged By Jeremy H. Hole Diameter: 3 inches | NRM20164 | | Hand Auger |
|---------------------|--|---------------------------------|-----------|----------|--|----------|-------------------------|--|--|---|--|------------|
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | (ft bgs) | USCS/Rock Symbol | | Lith | nology/R | emarks | |
| D M M D D | BDL 0.8 BDL 1.0 BDL 1.0 BDL 1.0 | 0.0 0.0 0.0 0.0 0.0 | Z Z Z Z Z | BH11A | 1 0.5' | 1 2 | SW-SM SW-SM SW-SM | No odor, Fine-cora No odor, Fine-cora No odor, Fine-cora No odor, Fine-cora | ase grain, well graded No plasticity, Organiase grain, well graded | cs. Light w/ silt ar cs. Brow w/ silt ar cs. Brow w/ silt ar cs. Light w/ silt ar | t Brown/ Red and gravel wn/red and gravel wn/red and gravel t Brown/red and gravel | |

| Lat/Lo | | LITH |) OLOG | 5 Carl | 08 West S sbad, Ne | w Mexico | G | | BH or PH Name: BH12 Site Name: Row 4 V RP or Incident Num WSP Job Number: Logged By Jeremy I Hole Diameter: 3 inches | be NRM20164 T | | Hand Auger |
|---------------------|--|---------------------------------|-----------|-----------|-----------------------------|-------------------|-------------------------|--|--|---|--|------------|
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | | Lithology/R | emarks | |
| D M M M M | BDL 0.8 BDL 0.8 BDL 0.8 BDL 0.6 | 0.0 0.0 0.1 0.0 0.0 | Z Z Z Z | BH12A | 1' | | SW-SM SW-SM SW-SM | No odor, Fine-cora No odor, Fine-cora No odor, Fine-cora No odor, Fine-cora | ise grain, well grace No plasticity, Orguse gr | ganics. Light ded w/ silt ar ganics. Brow ded w/ silt ar ganics. Brow ded w/ silt ar ganics. Brow ded w/ silt ar | t Brown/red and gravel yn/red and gravel yn/red and gravel yn/red and gravel yn/red and gravel | |

| | \\' | LITH |) OLOG | 5 Car GIC / SOIL | 08 West S sbad, Ne | ING LO | | | BH or PH Name: PH01 Site Name: Row 4 RP or Incident Nur WSP Job Number Logged By Robert | mbe NRM20164 : T | 160654 E12920091 Method: | Trackhoe |
|---------------------|-------------------|----------------|-----------|------------------------|-----------------------------|----------|---------------------|-------------------|--|---------------------------|--------------------------------|----------|
| Lat/Lo | ong: | | | | Field Scre Chloride, | | | | Hole Diameter: 2 feet | | Total Depth: 4 feet | |
| Comn | nents: | | | | Officiac, | | | | | | 11000 | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | (ft bgs) | USCS/Rock Symbol | | | Lithology/R | emarks | |
| M | 4,088 | 0.9 | N | PH01 | 1' _ | 0 | SP-SM | Dark Bro | wn, fine-very fin | e grain, poorl | y graded | |
| D | fine | | | | | | | | l cemented, highl brown sand, wh | ly consolidate ite/tan | d, trace | |
| D | 180 | 0.1 | Z | PH01A | 4' | 3 | CHCE | Moderate white/ta | ly cemented, low | r-moderate co | nsolidation, | |

| _ | | | _ | | | | | BH or PH Name: Date: |
|---------------------|-------------------|----------------|----------|------------|-----------------------------|-------------------|---------------------|---|
| Y | 110 | | | | WS | P USA | | PH02 9/28/2020 |
| | | 19 | D | 5 | 08 West S | Stevens S | Street | Site Name: Row 4 Wolverine SWD Riser |
| | | | | Carl | sbad, Ne | w Mexico | 88220 | RP or Incident Numbe NRM2016460654 |
| | | | | | | | | WSP Job Number: TE12920091 |
| | | LITH | OLOG | SIC / SOIL | | | G | Logged By Robert M. Method: Trackhoe |
| Lat/Lo | ng: | | | | Field Scre Chloride, | | | Hole Diameter: Total Depth: 2 feet 12 feet |
| Comm | nents: | | | | Cilionae, | | | 12 1661 |
| | | | | | | | | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
| | | | | | 1 | 0 | | |
| M | 2,279 | 0.3 | N | | 1' | 1 | SP-SM | Dark brown, very fine-fine grain, poorly graded |
| M | 2,218 | 0.2 | N | | 2' | _ 2 | SP-SM | SAA |
| D | 5,756 | 0.2 | N | | 3' | 3 | СНСЕ | Well cemented, well consolidated, white/tan, fines - |
| | | | | | - | 4 | | pebbles - cobbles |
| D | 7,330 | | N | | 5' | - 5 | СНСЕ | low- moderate consolidation, white/tan, fine - cobble |
| D | 10,013 | | N | PH02 | 6' | - 6 | СНСЕ | low- moderate consolidation, white/tan, fine - cobble |
| D | 7,330 | | N | | 7' | 7 | | low- moderate consolidation, white/tan, fine - cobble |
| | ŕ | | | | - | - 8 | | |
| D | 5,759 | | N | | 9' | - - 9 | СНСЕ | low- moderate consolidation, white/tan, fine - cobble |
| D | 4,088 | | N | | 10' | 10 | CHCE | low- moderate consolidation, white/tan, fine - cobble |
| | | | | | - | 11 | | with more fine grain brown sand content |
| D | 347 | | N | PH02A | 12' | 12 | СНСЕ | low- moderate consolidation, white/tan, fine - cobble with more fine grain brown sand content |
| | | | | | _ | [| | |
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| | \\' | LITH |) OLOG | 5 Car GIC / SOIL | 08 West S sbad, Ne | w Mexico | 88220 | | BH or PH Name: PH03 Site Name: Row 4 Wo RP or Incident Numb WSP Job Number: Logged By Robert M. | e NRM20164 T | | Trackhoe |
|---------------------|-------------------|----------------|-----------|------------------------|-----------------------------|-------------------|---------------------|-----------|---|-----------------|----------------|----------|
| Lat/Lo | ong: | | | | Field Scre | ening: | | | Hole Diameter: | | Total Depth: | |
| Comn | nonte: | | | | Chloride, | PID | | | 2 feet | | 4 feet | |
| Comm | nents. | | | | | | | | | | | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | L | ithology/R | emarks | |
| | | | | | 1 | 0 | | | | | | |
| M | 3,735 | 0.4 | N | PH03 | 1' | 1 | SP-SM | Brown, fi | ne grain, poor grad | e | | |
| D | 3,735 | 0.1 | N | | 2' | _ 2 | CHCE | Well ceme | ented, well consolic | dated, whit | e/tan, fines - | |
| D | 347 | 0.2 | N | PH03A | 3' | 3 | CHCE | | erate consolidation | , white/tan, | fine - cobble | |
| D | 128 | 0.1 | N | | 4' | 4 | CHCE | low- mod | erate consolidation | , white/tan, | fine - cobble | |
| | | | | | | | | | | | | |

| | 111 | LITH |) OLOG | 5 Car GIC / SOIL | 08 West S Isbad, Ne | w Mexico | 88220 | | BH or PH Name: PH04 Site Name: Row 4 V RP or Incident Num WSP Job Number: Logged By Robert N Hole Diameter: | nbe NRM20164 T | | Trackhoe |
|---------------------|-------------------|----------------|-----------|------------------------|-------------------------------|----------|---------------------|-----------|---|-------------------|-----------------|----------|
| Lat/Lo | | | | | Chloride, | | | | Hole Diameter: 2 feet | | 6 feet | |
| Comm | nents: | | | | | | | | | | | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | (ft bgs) | USCS/Rock Symbol | | | Lithology/R | demarks | |
| M | 2,044 | 1.2 | N | | <u> </u> _{1'} - | 0 1' | SP-SM | Brown, fi | ne grain, poor gra | ıde | | |
| D | 7,330 | 1.6 | N | PH04 | 2' | 2' | | | ented, well conso | | e/tan, fines - | |
| D | 5757 | 0.4 | N | | 3' | 3 | CHCE | | erate consolidatio | on, white/tan | , fine - cobble | |
| D | 7,330 | 0.1 | N | | 4' | 4 | CHCE | low- mod | erate consolidatio | on, white/tan | , fine - cobble | |
| D | 580 | 0.1 | N | PH04A | 6' | 5 6 | | | erate consolidatio | | | |

| | \\' | |) | 5 Car BIC / SOIL | 08 West S sbad, Ne | w Mexico | 88220 | | BH or PH Name: PH05 Site Name: Row 4 Wolv RP or Incident Numbe WSP Job Number: Logged By Robert M. | NRM2016 | | Trackhoe |
|---------------------|-------------------|----------------|----------|------------------------|-----------------------------|-------------------|---------------------|-----------|--|-------------|------------------|----------|
| Lat/Lo | ong: | LIIII | OLOG | 7 301 | Field Scre | | <u> </u> | | Hole Diameter: | | Total Depth: | Hackilde |
| | | | | | Chloride, I | | | | 2 feet | | 4 feet | |
| Comn | nents: | | | | | | | | | | | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | Litl | hology/R | emarks | |
| | | | | | 1 | 0 | | | | | | |
| M | 2,044 | 1.0 | N | | 1' | 1' | SP-SM | Brown, fi | ne grain, poor grade | | | |
| D | 4.066 | 1.0 | N | D1107 | - | 2' | CHOE | Wall com | ented, well consolida | atad whit | alton finas | |
| D | 4,866 | 1.2 | N | PH05 | 2' | | CHCE | pebbles - | | atea, wiiit | e/taii, iiiies - | |
| D | 1702 | 0.4 | N | | 3' | 3' | CHCE | low- mod | erate consolidation, | white/tan | , fine - cobble | |
| D | 212 | 0.1 | N | PH05A | 4' | 4' | СНСЕ | low- mod | erate consolidation, | white/tan | , fine - cobble | |
| | | | | | | | | | | | | |

| | \\' | LITH |) OLOG | 5 Car BIC / SOIL | 08 West S sbad, Nev | w Mexico | 88220 | | BH or PH Name: PH06 Site Name: Row 4 Wolve RP or Incident Numbe N WSP Job Number: Logged By Robert M. | IRM20164 | 460654 E12920091 Method: | Trackhoe |
|---------------------|-------------------|----------------|-----------|------------------------|-----------------------------|-------------------|---------------------|-----------|---|-----------|--------------------------------|----------|
| Lat/Lo | ong: | | | | Field Scre Chloride, I | | | | Hole Diameter: 2 feet | | Total Depth: 4 feet | |
| Comn | nents: | | | | Cilionae, i | - IU | | | 2 1001 | | 4 1661 | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | Lith | ology/R | emarks | |
| M | 3,365 | 1.9 | N | PH06 | 1' - | L - 1' - 2' | | | ne grain, poor grade | tod whit | a/tan finas | |
| D | 3,365 | 0.4 | N | | 2' | 2' | CHCE | pebbles - | ented, well consolidat cobbles | tea, wnit | e/tan, fines - | |
| D | 350 | 0.2 | N | | 3' | 3' | CHCE | | erate consolidation, w | hite/tan, | , fine - cobble | |
| D | 128 | 0.3 | N | PH06A | 4' | 4' | CHCE | low- mode | erate consolidation, w | hite/tan, | , fine - cobble | |
| | | | | | | | | | | | | |

| Lat/Lo | | LITH |) OLOG | 5 Car GIC / SOIL | 08 West S Isbad, Ne | W Mexico | 88220 | | BH or PH Name: PH07 Site Name: Row 4 Wolv RP or Incident Numbe! WSP Job Number: Logged By Robert M. Hole Diameter: 2 feet | NRM2016 | | Trackhoe |
|---------------------|-------------------|----------------|-----------|------------------------|-----------------------------|-------------------|---------------------|-----------|---|------------|-----------------|----------|
| Comm | nents: | | | | | | | | | | - | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | Litt | hology/R | temarks | |
| | | | | |] | 0 | | | | | | |
| M | 7,330 | 1.8 | N | PH07 | 1' | 1' | SP-SM | Brown, f | ne grain, poor grade | | | |
| D | 4,463 | 0.8 | N | | 2' | 2' | CHCE | Well cem | ented, well consolida | ated, whit | e/tan, fines - | |
| D | 1209 | 0.1 | N | | 3' | 3' | | pebbles - | cobbles lerate consolidation, v | | | |
| | | | | | _ | _ | | | | | | |
| D | 212 | 0.2 | N | PH07A | 4' | 4' | CHCE | low- mod | lerate consolidation, | white/tan | , fine - cobble | |
| | | | | | | | | | | | | |

| Lat/Lo | ona: | LITH |) OLOG | 5 Car GIC / SOIL | 08 West S sbad, Ne | w Mexico | 88220 | | BH or PH Name: PH08 Site Name: Row 4 Wolv RP or Incident Numbe N WSP Job Number: Logged By Jeremy Hill Hole Diameter: | NRM20164 | | Trackhoe |
|---------------------|---|----------------|-----------|------------------------|-----------------------------|----------|---------------------|----------------------|---|-----------------------|-------------------|----------|
| | | | | | Chloride, | | | | 2 feet | | 4 feet | |
| Comn | nents: | | | | | | | | | | | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | (ft bgs) | USCS/Rock Symbol | | Lith | ology/R | emarks | |
| M | 244 | 1.3 | N | | 1 1' _ | 0 | | | wn, fine-very fine gra | | | |
| D | D 928 1 N PH08 2' 2 SP-SM Dar | | | | | | | No odor, Dark Bro | No plasticity, Organio wn, fine-very fine gra | es. Red/ in, poorl | Brown y graded | |
| D | D 348 0.7 N 3' $\frac{T}{T}$ 3 CHCE No Ver fine | | | | | | | No odor, Very wel | No plasticity, Organic l cemented, highly con brown sand, white/ta | cs. Red/ nsolidate | Brown | |
| D | | | | | | | | | ely cemented, low-mo | | nsolidation, | |
| | | | | | | | | | | | | |

| Lat/Lo | ing: | LITH |) OLOG | 5 Car GIC / SOIL | 08 West S sbad, Ne | w Mexico | 88220 | | BH or PH Name: PH09 Site Name: Row 4 Wolve RP or Incident Numbe N WSP Job Number: Logged By Jeremy Hill Hole Diameter: 2 feet | RM20164 | | Trackhoe |
|---------------------|------------------------------|--------------------------|-----------|------------------------|-----------------------------|----------|------------------------|--|--|---|--|----------|
| Comm | nents: | | | | | | | | | | | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | (ft bgs) | USCS/Rock Symbol | | Lith | ology/R | emarks | |
| M M D D | 2,584 2,212 160 240 | 0.4 0.2 0.1 0.0 | | PH09 PH09A | 1' 2' 3' 4' | | SP-SM SP-SM CHCE | No odor, Dark Bro No odor, Very wel fine grain | wn, fine-very fine grain No plasticity, Organic wn, fine-very fine grain No plasticity, Organic I cemented, highly control brown sand, white/tably cemented, low-modelly cemente | es. Red/ in, poorl es. Red/ asolidate n | Brown y graded Brown d, trace | |
| | | | | | | | | | | | | |

| | \\' | LITH |) | 5 Car | 508 West S Isbad, Ne | | | | BH or PH Name: PH10 Site Name: Row 4 Wolve RP or Incident Numbe N WSP Job Number: | NRM2016 | | Tradhoo |
|---------------------|---|-------------------|-------------|------------|-----------------------------|----------|---------------------|-----------------------------------|---|-----------------------------------|----------------------|----------|
| Lat/Lo | and. | Liin | JLUG | IIC / SUIL | Field Scre | | G | | Logged By Jeremy Hill Hole Diameter: | | Method: Total Depth: | Trackhoe |
| | | | | | Chloride, I | | | | 2 feet | | 4 feet | |
| Comm | ients: | T | | Т | | | T | 1 | | | - | |
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | (ft bgs) | USCS/Rock Symbol | | Lith | iology/R | Remarks | |
| M M D | BDL 0.8 BDL 0.6 BDL | 0.0 0.0 0.1 | N N N | PH10 | 0.5' | 0 0.5 | SW-SM | No odor, Brown, fi No odor, | r fine grain, poorly gra No plasticity, Organic ine-med grain with gra No plasticity, Organic ely cemented, low-mod | cs. Brow avel, wel cs. Brow | ll graded vn | |
| D | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | | | | | white | ely cemented, low-mod | | | |
| D D | BDL 0.6 BDL 0.6 | 0.0 | N | PH10A | 3' 4' | 3 4 | | white | ely cemented, low-moderated, highly consolid | | onsolidation, | |

| Lat/Lo | \\' | LITH |) OLOG | 5 Car GIC / SOIL | 08 West S sbad, Nev | v Mexico | 88220 | | BH or PH Name: PH11 Site Name: Row 4 NRP or Incident Num WSP Job Number: Logged By Jeremy Hole Diameter: | nbe NRM2016 T | | Trackhoe |
|---------------------|--|------|-----------|-------------------------------|------------------------|--------------|-------|-------------------|--|------------------|------------|----------|
| | | | | | Chloride, F | | | | 2 feet | | 4 feet | |
| Comn | nents: | | | | - | | | | | | - | |
| Moisture Content | | | | | | | | | | Lithology/R | emarks | |
| D | BDL | 0.2 | N | | 0.5' | 0.5 | SW-SM | Brown, fi | ne-med grain wit | h gravel, wel | l graded | |
| | 0.8 | | | | 1 | | | No odor, | No plasticity, Org fine grain, poorl | ganics. Brov | | |
| | 0.8 | | | | 1 | _ | | No odor, | No plasticity, Org | ganics. Brov | vn | |
| M | $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | | | | SW-SM | Brown, fi | ne-med grain wit No plasticity, Or | h caliche, we | ell graded | |
| D | 0.8 0.0 N PH11 3' | | | | | | | Moderate | ly cemented, low | | | |
| D | 1.0 BDL | 0.1 | N | PH11A | 4' | 4 | CHCE | white Moderate | ly cemented, high | nly consolida | ted | |
| | 0.8 | | - ' | | 1 | - - | | white | , , , | , | | |
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| Lat/Lo | | LITH |) OLOG | 5 Car GIC / SOIL | 08 West S sbad, Ne | w Mexico | 88220 | | BH or PH Name: PH12 Site Name: Row 4 Wol RP or Incident Numbe WSP Job Number: Logged By Jeremy Hill Hole Diameter: 2 feet | NRM20164 | | Trackhoe |
|---------------------|--|---------------------------------|-----------|------------------------|-----------------------------|-------------------|---------------------|---|---|---|--------------------------------------|----------|
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | Lit | thology/R | emarks | |
| | BDL 0.8 BDL 0.8 BDL 0.8 BDL 0.8 | 0.0 0.0 0.1 0.0 0.0 | Z Z Z Z | PH12A | 1' | | SP CHCE CHCE | No odor, Fine-very No odor, Moderate white Moderate white | ine-med grain with g No plasticity, Organ of fine grain, poorly g No plasticity, Organ ely cemented, low-me ely cemented, highly | ics. Brow raded ics. Brow oderate co | on onsolidation, onsolidation, | |

| | ments: TD @ 5.5 | | | SIC / SOIL | 08 West Sabad, Ne | ING LO ening: PID | G | BH or PH Name: PH13 Site Name: Row 4 W RP or Incident Num WSP Job Number: Logged By Will Matl Hole Diameter: 20" | be NRM20164 T | | Back hoe |
|----------|--------------------|----------------|----------|---------------|-----------------------------|------------------------------------|---------------------|--|------------------|--------|----------|
| Moisture | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) 0 0.5 1 | USCS/Rock Symbol | ı | Lithology/R | emarks | |
| D D | BDL | 0.3 0.0 | N N | PH13 PH13A | 4.5 5.5 | - 3 - 4 - 4.5' - 5.5' | | Silty with poor cor | | | |

| Lat/Lo | nents: TD @ 5.5 | | | SIC / SOIL | 08 West Sabad, Ne | ING LO ening: PID | G | BH or PH Name: PH14 Site Name: Row 4 Wo RP or Incident Numb WSP Job Number: Logged By Will Mathe Hole Diameter: 20" | e NRM20164 T | | Back hoe |
|---------------------|--------------------|----------------|----------|---------------|-----------------------------|-------------------------------------|---------------------|---|-----------------|--------|----------|
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) 0 0.5 | USCS/Rock Symbol | L | ithology/R | emarks | |
| D D | 414.0 464.0 | 0.1 | N N | PH14 PH14A | 4.5 | 2 - 3 - 4 - 4.5' - 5.5' | | Silty with poor cons | | | |
| | | | | | | | | | | | |

| Lat/Lo | nents: TD @ 5.5 | | | SIC / SOIL | 08 West Sabad, Ne | ING LO | G | BH or PH Name: PH15 Site Name: Row 4 N RP or Incident Nun WSP Job Number: Logged By Will Ma Hole Diameter: 20" | nbe NRM20164 T | | Back hoe |
|---------------------|--------------------|----------------|----------|------------|-----------------------------|----------------|---------------------|--|-------------------|--------|----------|
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | | Lithology/R | emarks | |
| D D | BDL | 0.1 | Z Z | PH15A | 4.5 | 0.5 | | ed, coarse graine | | | |

| | nents: TD @ 5.5 | | | GIC / SOIL | 508 West Sample SAMPL Field Scree Chloride, | LING LO eening: PID | G | BH or PH Name: PH16 Site Name: Row 4 W RP or Incident Numb WSP Job Number: Logged By Will Math Hole Diameter: 20" | oe NRM20164 T | | Back hoe |
|---------------------|--------------------|----------------|----------|------------|---|---------------------------|---------------------|---|------------------|--------|----------|
| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | (ft bgs) | USCS/Rock Symbol | l | _ithology/R | emarks | |
| D D | 414.0 364.0 | 0.0 | N N | PH16 PH16 | 4.5 | 0 0.5 | | Silty with poor con | | | |

| Lat/Lo | nents: | |) OLOG | 5 Car GIC / SOIL | 08 West S sbad, Ne | ING LO | | BH or PH Name: PH17 Site Name: Row 4 W RP or Incident Number: WSP Job Number: Logged By Will Math Hole Diameter: 20" | be NRM20164 T | | Back hoe |
|---------------------|----------------|----------------|-----------|------------------------|-----------------------------|-------------------|---------------------|--|------------------|--------|----------|
| Moisture Content | Chloride @ 2.2 | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | 1 | Lithology/R | emarks | |
| D D | 296.0 BDL | 0.0 0.1 | Z Z | PH17A | 4.5 | 0 0.5 | | Silty with poor con | | | |

| Lat/Lo | nents: TD @ 5.5 | , | | SIC / SOIL | 08 West S sbad, Ne | ING LO ening: PID | G | | BH or PH Name: PH18 Site Name: Row 4 Wo RP or Incident Numb WSP Job Number: Logged By Will Math Hole Diameter: 20" | e NRM20164 T | | Back hoe |
|---------------------|------------------------------------|---|--|------------|-----------------------|-------------------------|---|--|--|-----------------|--------|----------|
| Moisture Content | D BDL 0.1 N PH18 4.5 4.5 CCHE Cal- | | | | | | | | L | ithology/R | emarks | |
| D D | | | | | | 4.5' | | | Silty with poor cons | | | |

| Lat/Lo | nents: TD @ 5.5 | , | | SIC / SOIL | 08 West S sbad, Ne | ING LO ening: PID | G | BH or PH Name: PH19 Site Name: Row 4 Wo RP or Incident Numbe WSP Job Number: Logged By Will Mathe Hole Diameter: 20" | e NRM20164 T | Back hoe |
|----------|--------------------|-------------|----------|------------|-----------------------|-------------------------|---------------------|--|-----------------|----------|
| Moisture | | Vapor (ppm) | Staining | Sample # | Depth (ft bgs) | (ft bgs) 0 0.5 1 2 3 | USCS/Rock Symbol | | thology/R | |
| D D | BDL | 0.1 | Z Z | PH19A | 4.5 5.5 | - 4.5' - 5.5' | | Silty with poor cons | | |

| Lat/Lo | nents: TD @ 5.5 | , | | SIC / SOIL | 008 West S Isbad, Ne | LING LO eening: PID | G | | BH or PH Name: PH20 Site Name: Row 4 N RP or Incident Num WSP Job Number: Logged By Will Ma Hole Diameter: 20" | nbe NRM2016 T | | Back hoe |
|---------------------|--|-----|--------|---------------|-------------------------|---------------------------|---|--|--|------------------|--------|----------|
| Moisture Content | Content Chloride (ppm) (mpm) (| | | | | | | | | Lithology/R | emarks | |
| D D | BDL BDL | 0.1 | N N | PH20 PH20A | 4.5 | Γ | | | Silty with poor co | | | |
| | | | | | | | | | | | | |



Certificate of Analysis Summary 663699

LT Environmental, Inc., Arvada, CO

Project Name: Wolverine SWD River

Project Id: 012920091
Contact: Kyle Littrell

Date Received in Lab: Mon 06.08.2020 11:00

Report Date: 06.09.2020 13:28

Project Location:

Project Manager: Jessica Kramer

| | Lab Id: | 663699-0 | 001 | 663699-0 | 02 | 663699-0 | 003 | 663699- | 004 | 663699-0 | 005 | 663699-0 | 006 |
|------------------------------------|------------|------------|-------------------------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|---------|
| Analysis Requested | Field Id: | SS01 | | SS02 | | SS03 | | SS04 | | SS05 | | SS06 | |
| Anaiysis Kequesieu | Depth: | 6.5- ft | | 6.5- ft | | 6.5- ft | : | 6.5- f | t | 6.5- ft | | 6.5- ft | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | Sampled: | 06.05.2020 | 13:20 | 06.05.2020 | 13:33 | 06.05.2020 | 13:42 | 06.05.2020 | 13:58 | 06.05.2020 | 14:22 | 06.05.2020 | 14:30 |
| BTEX by EPA 8021B | Extracted: | 06.08.2020 | 13:14 | 06.08.2020 | 13:14 | 06.08.2020 | 13:14 | 06.08.2020 | 13:14 | 06.08.2020 | 13:14 | 06.08.2020 | 13:14 |
| | Analyzed: | 06.08.2020 | 16:45 | 06.08.2020 | 17:05 | 06.08.2020 | 17:26 | 06.08.2020 | 17:46 | 06.08.2020 | 18:06 | 06.08.2020 | 18:27 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Benzene | | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00200 | 0.00200 |
| Toluene | | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00200 | 0.00200 |
| Ethylbenzene | | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00200 | 0.00200 |
| m,p-Xylenes | | < 0.00399 | 0.00399 | < 0.00399 | 0.00399 | < 0.00401 | 0.00401 | < 0.00398 | 0.00398 | < 0.00396 | 0.00396 | < 0.00400 | 0.00400 |
| o-Xylene | | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00200 | 0.00200 |
| Total Xylenes | | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00200 | 0.00200 |
| Total BTEX | | < 0.00200 | 0200 0.00200 <0.00200 0.00200 | | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00200 | 0.00200 | |
| Chloride by EPA 300 | Extracted: | 06.08.2020 | 17:00 | 06.08.2020 | 17:00 | 06.08.2020 | 17:00 | 06.08.2020 | 17:00 | 06.08.2020 | 17:00 | 06.08.2020 | 17:00 |
| | Analyzed: | 06.08.2020 | 18:22 | 06.08.2020 | 18:39 | 06.08.2020 | 18:45 | 06.08.2020 | 18:51 | 06.08.2020 | 18:56 | 06.08.2020 | 19:14 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 7430 | 99.0 | 186 | 9.92 | 83.1 | 9.92 | 5480 | 100 | 8600 | 100 | 7250 | 100 |
| TPH by SW8015 Mod | Extracted: | 06.08.2020 | 13:30 | 06.08.2020 | 13:30 | 06.08.2020 | 13:30 | 06.08.2020 | 13:30 | 06.08.2020 | 13:30 | 06.08.2020 | 13:30 |
| | Analyzed: | 06.08.2020 | 15:21 | 06.08.2020 | 14:19 | 06.08.2020 | 15:41 | 06.08.2020 | 16:02 | 06.08.2020 | 16:22 | 06.08.2020 | 16:43 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Gasoline Range Hydrocarbons (GRO) | | <49.8 | 49.8 | <49.8 | 49.8 | <49.8 | 49.8 | <49.9 | 49.9 | <49.9 | 49.9 | < 50.2 | 50.2 |
| Diesel Range Organics (DRO) | | <49.8 | 49.8 | <49.8 | 49.8 | <49.8 | 49.8 | <49.9 | 49.9 | <49.9 | 49.9 | < 50.2 | 50.2 |
| Motor Oil Range Hydrocarbons (MRO) | | <49.8 | 49.8 | <49.8 | 49.8 | <49.8 | 49.8 | <49.9 | 49.9 | <49.9 | 49.9 | < 50.2 | 50.2 |
| Total GRO-DRO | | <49.8 | 49.8 | <49.8 | 49.8 | <49.8 | 49.8 | <49.9 | 49.9 | <49.9 | 49.9 | < 50.2 | 50.2 |
| Total TPH | | <49.8 | 49.8 | <49.8 | 49.8 | <49.8 | 49.8 | <49.9 | 49.9 | <49.9 | 49.9 | < 50.2 | 50.2 |

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

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

Jessica Weamer

Jessica Kramer Project Manager

Received by OCD: 6/14/2021 7:35:13 AM XENCO LABORATORIES

Certificate of Analysis Summary 663699

LT Environmental, Inc., Arvada, CO

Project Name: Wolverine SWD River

Project Id: 012920091
Contact: Kyle Littrell

Project Location:

Date Received in Lab: Mon 06.08.2020 11:00

Report Date: 06.09.2020 13:28

Project Manager: Jessica Kramer

| | | | | | | | | | |
|------------------------------------|------------|------------|---------|------------|---------|------------|---------|------|--|
| | Lab Id: | 663699-0 | 07 | 663699-0 | 08 | 663699-0 | 09 | | |
| Analysis Requested | Field Id: | SS07 | | SS08 | | SS09 | | | |
| Analysis Requesieu | Depth: | 6.5- ft | | 6.5- ft | | 6.5- ft | | | |
| | Matrix: | SOIL | | SOIL | | SOIL | | | |
| | Sampled: | 06.05.2020 | 14:36 | 06.05.2020 | 14:42 | 06.05.2020 | 14:52 | | |
| BTEX by EPA 8021B | Extracted: | 06.08.2020 | 13:14 | 06.08.2020 | 13:14 | 06.08.2020 | 13:14 | | |
| | Analyzed: | 06.08.2020 | 18:47 | 06.08.2020 | 19:07 | 06.08.2020 | 19:28 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | | |
| Benzene | | < 0.00199 | 0.00199 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | | |
| Toluene | | < 0.00199 | 0.00199 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | | |
| Ethylbenzene | | < 0.00199 | 0.00199 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | | |
| m,p-Xylenes | | | 0.00398 | < 0.00398 | 0.00398 | < 0.00396 | 0.00396 | | |
| o-Xylene | | < 0.00199 | 0.00199 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | | |
| Total Xylenes | | < 0.00199 | 0.00199 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | | |
| Total BTEX | | < 0.00199 | 0.00199 | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | | |
| Chloride by EPA 300 | Extracted: | 06.08.2020 | 17:00 | 06.08.2020 | 17:00 | 06.08.2020 | 17:00 | | |
| | Analyzed: | 06.08.2020 | 19:20 | 06.08.2020 | 19:25 | 06.08.2020 | 19:31 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | | |
| Chloride | | 5350 | 99.8 | 4770 | 99.8 | 5170 | 99.8 | | |
| TPH by SW8015 Mod | Extracted: | 06.08.2020 | 13:30 | 06.08.2020 | 13:30 | 06.08.2020 | 13:30 | | |
| | Analyzed: | 06.08.2020 | 17:03 | 06.08.2020 | 17:24 | 06.08.2020 | 17:45 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | | |
| Gasoline Range Hydrocarbons (GRO) | | < 50.0 | 50.0 | < 50.0 | 50.0 | <49.8 | 49.8 | | |
| Diesel Range Organics (DRO) | | < 50.0 | 50.0 | < 50.0 | 50.0 | <49.8 | 49.8 | | |
| Motor Oil Range Hydrocarbons (MRO) | | < 50.0 | 50.0 | < 50.0 | 50.0 | <49.8 | 49.8 | | |
| Total GRO-DRO | | <50.0 | 50.0 | < 50.0 | 50.0 | <49.8 | 49.8 | | |
| Total TPH | | < 50.0 | 50.0 | < 50.0 | 50.0 | <49.8 | 49.8 | | |

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

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

Jessica Kramer



Analytical Report 663699

for

LT Environmental, Inc.

Project Manager: Kyle Littrell

Wolverine SWD River 012920091 06.09.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.09.2020

Project Manager: **Kyle Littrell LT Environmental, Inc.** 4600 W. 60th Avenue Arvada, CO 80003

Reference: XENCO Report No(s): 663699

Wolverine SWD River

Project Address:

Kyle Littrell:

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) 663699. 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. 663699 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 Manager

A Small Business and Minority Company

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



Sample Cross Reference 663699

LT Environmental, Inc., Arvada, CO

Wolverine SWD River

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SS01 | S | 06.05.2020 13:20 | 6.5 ft | 663699-001 |
| SS02 | S | 06.05.2020 13:33 | 6.5 ft | 663699-002 |
| SS03 | S | 06.05.2020 13:42 | 6.5 ft | 663699-003 |
| SS04 | S | 06.05.2020 13:58 | 6.5 ft | 663699-004 |
| SS05 | S | 06.05.2020 14:22 | 6.5 ft | 663699-005 |
| SS06 | S | 06.05.2020 14:30 | 6.5 ft | 663699-006 |
| SS07 | S | 06.05.2020 14:36 | 6.5 ft | 663699-007 |
| SS08 | S | 06.05.2020 14:42 | 6.5 ft | 663699-008 |
| SS09 | S | 06.05.2020 14:52 | 6.5 ft | 663699-009 |

CASE NARRATIVE

Client Name: LT Environmental, Inc. Project Name: Wolverine SWD River

Project ID: Report Date: 06.09.2020 012920091 Work Order Number(s): 663699 Date Received: 06.08.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS01

Matrix: Soil

Date Received:06.08.2020 11:00

Lab Sample Id: 663699-001

Date Collected: 06.05.2020 13:20

Sample Depth: 6.5 ft
Prep Method: E300P

Analytical Method: Chloride by EPA 300

% Moisture:

Tech:

Analyst:

MAB MAB

Date Prep: 06.08.2020 17:00

Basis:

Wet Weight

Seq Number: 3128315

 Parameter
 Cas Number
 Result
 RL
 Units
 Analysis Date
 Flag
 Dil

 Chloride
 16887-00-6
 7430
 99.0
 mg/kg
 06.08.2020 18:22
 10

Analytical Method: TPH by SW8015 Mod

DTH

Prep Method: SW8015P

% Moisture:

Tech: DTH

Analyst:

Date Prep: 06.08.2020 13:30

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|-----------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.8 | 49.8 | | mg/kg | 06.08.2020 15:21 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.8 | 49.8 | | mg/kg | 06.08.2020 15:21 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.8 | 49.8 | | mg/kg | 06.08.2020 15:21 | U | 1 |
| Total GRO-DRO | PHC628 | <49.8 | 49.8 | | mg/kg | 06.08.2020 15:21 | U | 1 |
| Total TPH | PHC635 | <49.8 | 49.8 | | mg/kg | 06.08.2020 15:21 | U | 1 |
| Surrogate | C | as Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|------------------|
| 1-Chlorooctane | 111-85-3 | 92 | % | 70-135 | 06.08.2020 15:21 |
| o-Terphenyl | 84-15-1 | 87 | % | 70-135 | 06.08.2020 15:21 |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: **SS01** Matrix: Soil Date Received:06.08.2020 11:00

Lab Sample Id: 663699-001 Date Collected: 06.05.2020 13:20 Sample Depth: 6.5 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

MAB Analyst: Date Prep: 06.08.2020 13:14 Basis: Wet Weight

| Parameter | Cas Number | Result | \mathbf{RL} | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|---------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 16:45 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 16:45 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 16:45 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00399 | 0.00399 | | mg/kg | 06.08.2020 16:45 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 16:45 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 16:45 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 16:45 | U | 1 |
| Surrogate | (| Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| A Bromofluorobanzana | 1 | 60.00.4 | 07 | 0/- | 70 130 | 06.08.2020.16:45 | | |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS02

Matrix: Soil

Date Received:06.08.2020 11:00

Lab Sample Id: 663699-002

Date Collected: 06.05.2020 13:33

Sample Depth: 6.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech: MA

Analyst:

MAB MAB

Date Prep: 06.08.2020 17:00

Basis:

Wet Weight

Seq Number: 3128315

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 186 | 9.92 | mg/kg | 06.08.2020 18:39 | | 1 |

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

% Moisture:

Tech:
Analyst:

DTH DTH

Date Prep: 06.08.2020 13:30

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.8 | 49.8 | | mg/kg | 06.08.2020 14:19 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.8 | 49.8 | | mg/kg | 06.08.2020 14:19 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.8 | 49.8 | | mg/kg | 06.08.2020 14:19 | U | 1 |
| Total GRO-DRO | PHC628 | <49.8 | 49.8 | | mg/kg | 06.08.2020 14:19 | U | 1 |
| Total TPH | PHC635 | <49.8 | 49.8 | | mg/kg | 06.08.2020 14:19 | U | 1 |
| Surrogate | (| Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|------------------|
| 1-Chlorooctane | 111-85-3 | 88 | % | 70-135 | 06.08.2020 14:19 |
| o-Terphenyl | 84-15-1 | 85 | % | 70-135 | 06.08.2020 14:19 |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS02 Matrix: Soil Date Received:06.08.2020 11:00

Lab Sample Id: 663699-002 Date Collected: 06.05.2020 13:33 Sample Depth: 6.5 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

460-00-4

Analyst: MAB Date Prep: 06.08.2020 13:14 Basis: Wet Weight

Seq Number: 3128312

4-Bromofluorobenzene

| 71.40.0 | 0.00200 0.00200 | | | | | |
|------------------------------|-----------------|-----------|---------|------------------|------|---|
| Benzene 71-43-2 <0 | 200 | mg | g/kg 06 | 6.08.2020 17:05 | U | 1 |
| Toluene 108-88-3 <0 | 0.00200 0.00200 | mg | g/kg 00 | 6.08.2020 17:05 | U | 1 |
| Ethylbenzene 100-41-4 <0 | 0.00200 0.00200 | mg | g/kg 00 | 6.08.2020 17:05 | U | 1 |
| m,p-Xylenes 179601-23-1 <0 | 0.00399 0.00399 | mg | g/kg 00 | 6.08.2020 17:05 | U | 1 |
| o-Xylene 95-47-6 <0 | 0.00200 0.00200 | mg | g/kg 00 | 6.08.2020 17:05 | U | 1 |
| Total Xylenes 1330-20-7 <0 | 0.00200 0.00200 | mg | g/kg 06 | 6.08.2020 17:05 | U | 1 |
| Total BTEX <0 | 0.00200 0.00200 | mg | g/kg 06 | 6.08.2020 17:05 | U | 1 |
| Surrogate Cas Num | ber % Recover | y Units I | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene 540-36-3 | 106 | % 7 | 0-130 | 06.08.2020 17:05 | | |

96

70-130

06.08.2020 17:05



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS03 Matrix: Soil

Date Received:06.08.2020 11:00

Lab Sample Id: 663699-003 Date Collected: 06.05.2020 13:42

Sample Depth: 6.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moistur

% Moisture:

Analyst: MAB Seq Number: 3128315 Date Prep: 06.08.2020 17:00

Basis: Wet Weight

 Parameter
 Cas Number
 Result
 RL
 Units
 Analysis Date
 Flag
 Dil

 Chloride
 16887-00-6
 83.1
 9.92
 mg/kg
 06.08.2020 18:45
 1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 06.08.2020 13:30

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|-------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.8 | 49.8 | | mg/kg | 06.08.2020 15:41 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.8 | 49.8 | | mg/kg | 06.08.2020 15:41 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.8 | 49.8 | | mg/kg | 06.08.2020 15:41 | U | 1 |
| Total GRO-DRO | PHC628 | <49.8 | 49.8 | | mg/kg | 06.08.2020 15:41 | U | 1 |
| Total TPH | PHC635 | <49.8 | 49.8 | | mg/kg | 06.08.2020 15:41 | U | 1 |
| Surrogate | Ca | as Number % | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|----------------------|
| 1-Chlorooctane | 111-85-3 | 89 | % | 70-135 | 06.08.2020 15:41 |
| o-Terphenyl | 84-15-1 | 89 | % | 70-135 | 06.08.2020 15:41 |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS03 Matrix: Soil Date Received:06.08.2020 11:00

Lab Sample Id: 663699-003 Date Collected: 06.05.2020 13:42 Sample Depth: 6.5 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 06.08.2020 13:14 Basis: Wet Weight

| Parameter | Cas Number | r Result | \mathbf{RL} | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|---------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 17:26 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 17:26 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 17:26 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00401 | 0.00401 | | mg/kg | 06.08.2020 17:26 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 17:26 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 17:26 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 17:26 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene | | 540-36-3 | 109 | % | 70-130 | 06.08.2020 17:26 | | |
| 4-Bromofluorobenzene | | 460-00-4 | 98 | % | 70-130 | 06.08.2020 17:26 | | |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS04

Matrix: Soil

Date Received:06.08.2020 11:00

Lab Sample Id: 663699-004

Date Collected: 06.05.2020 13:58

Sample Depth: 6.5 ft

Prep Method: E300P

Analytical Method: Chloride by EPA 300

% Moisture:

Tech:

Analyst:

MAB MAB

Date Prep: 06.08.2020 17:00

Basis:

Wet Weight

Seq Number: 3128315

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|-----|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 5480 | 100 | mg/kg | 06.08.2020 18:51 | | 10 |

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

% Moisture:

Tech:
Analyst:

DTH DTH

Date Prep: 06.08.2020 13:30

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.9 | 49.9 | | mg/kg | 06.08.2020 16:02 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.9 | 49.9 | | mg/kg | 06.08.2020 16:02 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.9 | 49.9 | | mg/kg | 06.08.2020 16:02 | U | 1 |
| Total GRO-DRO | PHC628 | <49.9 | 49.9 | | mg/kg | 06.08.2020 16:02 | U | 1 |
| Total TPH | PHC635 | <49.9 | 49.9 | | mg/kg | 06.08.2020 16:02 | U | 1 |
| Surrogate | (| Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|------------------|
| 1-Chlorooctane | 111-85-3 | 92 | % | 70-135 | 06.08.2020 16:02 |
| o-Terphenyl | 84-15-1 | 88 | % | 70-135 | 06.08.2020 16:02 |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS04 Matrix: Soil Date Received:06.08.2020 11:00

Lab Sample Id: 663699-004 Date Collected: 06.05.2020 13:58 Sample Depth: 6.5 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 06.08.2020 13:14 Basis: Wet Weight

| Parameter | Cas Number | r Result | \mathbf{RL} | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|---------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 17:46 | U | 1 |
| Toluene | 108-88-3 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 17:46 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 17:46 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00398 | 0.00398 | | mg/kg | 06.08.2020 17:46 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 17:46 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 17:46 | U | 1 |
| Total BTEX | | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 17:46 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene | | 540-36-3 | 111 | % | 70-130 | 06.08.2020 17:46 | | |
| 4-Bromofluorobenzene | | 460-00-4 | 101 | % | 70-130 | 06.08.2020 17:46 | | |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: **SS05** Soil

06.08.2020 17:00

Date Received:06.08.2020 11:00

Lab Sample Id: 663699-005 Date Collected: 06.05.2020 14:22 Sample Depth: 6.5 ft

Prep Method: E300P

Analytical Method: Chloride by EPA 300

% Moisture:

Tech: MAB

Analyst:

MAB Date Prep:

Basis:

Wet Weight

Seq Number: 3128315

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|-----|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 8600 | 100 | mg/kg | 06.08.2020 18:56 | | 10 |

Matrix:

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

% Moisture:

Tech: Analyst: DTH DTH

06.08.2020 13:30 Date Prep:

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.9 | 49.9 | | mg/kg | 06.08.2020 16:22 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.9 | 49.9 | | mg/kg | 06.08.2020 16:22 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.9 | 49.9 | | mg/kg | 06.08.2020 16:22 | U | 1 |
| Total GRO-DRO | PHC628 | <49.9 | 49.9 | | mg/kg | 06.08.2020 16:22 | U | 1 |
| Total TPH | PHC635 | <49.9 | 49.9 | | mg/kg | 06.08.2020 16:22 | U | 1 |
| Surrogate | (| Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | |
|----------------|------------|------------|-------|--------|----------------------|--|
| 1-Chlorooctane | 111-85-3 | 89 | % | 70-135 | 06.08.2020 16:22 | |
| o-Terphenyl | 84-15-1 | 87 | % | 70-135 | 06.08.2020 16:22 | |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS05 Matrix: Soil Date Received:06.08.2020 11:00

Lab Sample Id: 663699-005 Date Collected: 06.05.2020 14:22 Sample Depth: 6.5 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 06.08.2020 13:14 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 18:06 | U | 1 |
| Toluene | 108-88-3 | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 18:06 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 18:06 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00396 | 0.00396 | | mg/kg | 06.08.2020 18:06 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 18:06 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 18:06 | U | 1 |
| Total BTEX | | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 18:06 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene | | 540-36-3 | 105 | % | 70-130 | 06.08.2020 18:06 | | |
| 4-Bromofluorobenzene | | 460-00-4 | 93 | % | 70-130 | 06.08.2020 18:06 | | |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS06 Matrix: Soil

Date Received:06.08.2020 11:00

Lab Sample Id: 663699-006 Date Collected: 06.05.2020 14:30

Sample Depth: 6.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 17:00

Basis: Wet

Wet Weight

Seq Number: 3128315

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|-----|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 7250 | 100 | mg/kg | 06.08.2020 19:14 | | 10 |

Analytical Method: TPH by SW8015 Mod

DTH

DTH

Prep Method: SW8015P

% Moisture:

Tech:

Analyst:

Date Prep: 06.08.2020 13:30

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <50.2 | 50.2 | | mg/kg | 06.08.2020 16:43 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.2 | 50.2 | | mg/kg | 06.08.2020 16:43 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.2 | 50.2 | | mg/kg | 06.08.2020 16:43 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.2 | 50.2 | | mg/kg | 06.08.2020 16:43 | U | 1 |
| Total TPH | PHC635 | < 50.2 | 50.2 | | mg/kg | 06.08.2020 16:43 | U | 1 |
| Surrogate | (| Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | Fl |
|----------------|------------|------------|-------|--------|----------------------|----|
| 1-Chlorooctane | 111-85-3 | 90 | % | 70-135 | 06.08.2020 16:43 | |
| o-Terphenyl | 84-15-1 | 86 | % | 70-135 | 06.08.2020 16:43 | |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS06 Matrix: Soil Date Received:06.08.2020 11:00

Lab Sample Id: 663699-006 Date Collected: 06.05.2020 14:30 Sample Depth: 6.5 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 06.08.2020 13:14 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 18:27 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 18:27 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 18:27 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00400 | 0.00400 | | mg/kg | 06.08.2020 18:27 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 18:27 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 18:27 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 06.08.2020 18:27 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 95 | % | 70-130 | 06.08.2020 18:27 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 109 | % | 70-130 | 06.08.2020 18:27 | | |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: **SS07** Matrix: Soil Date Received:06.08.2020 11:00

Lab Sample Id: 663699-007

Date Collected: 06.05.2020 14:36

Sample Depth: 6.5 ft

Prep Method: E300P

Analytical Method: Chloride by EPA 300

% Moisture:

Tech:

Analyst:

MAB MAB

Date Prep: 06.08.2020 17:00 Basis:

Wet Weight

Flag

Seq Number: 3128315

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 5350 | 99.8 | mg/kg | 06.08.2020 19:20 | | 10 |

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

% Moisture:

Tech:

DTH

Analyst: DTH

Seq Number: 3128299

06.08.2020 13:30 Date Prep:

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|--------|------|-------|----------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.0 | 50.0 | mg/kg | 06.08.2020 17:03 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.0 | 50.0 | mg/kg | 06.08.2020 17:03 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.0 | 50.0 | mg/kg | 06.08.2020 17:03 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.0 | 50.0 | mg/kg | 06.08.2020 17:03 | U | 1 |
| Total TPH | PHC635 | < 50.0 | 50.0 | mg/kg | 06.08.2020 17:03 | U | 1 |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|------------------|
| 1-Chlorooctane | 111-85-3 | 93 | % | 70-135 | 06.08.2020 17:03 |
| o-Terphenyl | 84-15-1 | 87 | % | 70-135 | 06.08.2020 17:03 |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS07 Matrix: Soil Date Received:06.08.2020 11:00

Lab Sample Id: 663699-007 Date Collected: 06.05.2020 14:36 Sample Depth: 6.5 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

540-36-3

Analyst: MAB Date Prep: 06.08.2020 13:14 Basis: Wet Weight

Seq Number: 3128312

1,4-Difluorobenzene

| Parameter | Cas Number | Result | \mathbf{RL} | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|---------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 18:47 | U | 1 |
| Toluene | 108-88-3 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 18:47 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 18:47 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00398 | 0.00398 | | mg/kg | 06.08.2020 18:47 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 18:47 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 18:47 | U | 1 |
| Total BTEX | | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 18:47 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 98 | % | 70-130 | 06.08.2020 18:47 | | |

112

70-130

06.08.2020 18:47



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: **SS08** Matrix: Soil Date Received:06.08.2020 11:00

Lab Sample Id: 663699-008

Date Collected: 06.05.2020 14:42

Sample Depth: 6.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

MAB Tech:

Analyst:

MAB

Date Prep: 06.08.2020 17:00 Basis:

Wet Weight

Seq Number: 3128315

Result **Parameter** Cas Number RLUnits **Analysis Date** Dil Flag Chloride 16887-00-6 4770 99.8 mg/kg 06.08.2020 19:25 10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

% Moisture:

Tech: Analyst: DTH DTH

06.08.2020 13:30 Date Prep:

Basis:

Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.0 | 50.0 | | mg/kg | 06.08.2020 17:24 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.0 | 50.0 | | mg/kg | 06.08.2020 17:24 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.0 | 50.0 | | mg/kg | 06.08.2020 17:24 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.0 | 50.0 | | mg/kg | 06.08.2020 17:24 | U | 1 |
| Total TPH | PHC635 | <50.0 | 50.0 | | mg/kg | 06.08.2020 17:24 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|------------------|
| 1-Chlorooctane | 111-85-3 | 91 | % | 70-135 | 06.08.2020 17:24 |
| o-Terphenyl | 84-15-1 | 86 | % | 70-135 | 06.08.2020 17:24 |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS08 Matrix: Soil Date Received:06.08.2020 11:00

Lab Sample Id: 663699-008 Date Collected: 06.05.2020 14:42 Sample Depth: 6.5 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

540-36-3

Analyst: MAB Date Prep: 06.08.2020 13:14 Basis: Wet Weight

Seq Number: 3128312

1,4-Difluorobenzene

| Parameter | Cas Number | Result | \mathbf{RL} | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|---------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 19:07 | U | 1 |
| Toluene | 108-88-3 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 19:07 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 19:07 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00398 | 0.00398 | | mg/kg | 06.08.2020 19:07 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 19:07 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 19:07 | U | 1 |
| Total BTEX | | < 0.00199 | 0.00199 | | mg/kg | 06.08.2020 19:07 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 96 | % | 70-130 | 06.08.2020 19:07 | | |

110

70-130

06.08.2020 19:07



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Soil

Sample Id: **SS09** Matrix:

Date Received:06.08.2020 11:00

Lab Sample Id: 663699-009 Date Collected: 06.05.2020 14:52 Sample Depth: 6.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB % Moisture:

MAB Analyst:

Date Prep: 06.08.2020 17:00 Basis:

Wet Weight

Seq Number: 3128315

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 5170 | 99.8 | mg/kg | 06.08.2020 19:31 | | 10 |

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

% Moisture:

Tech:

Analyst:

DTH DTH

06.08.2020 13:30 Date Prep:

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|-----------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.8 | 49.8 | | mg/kg | 06.08.2020 17:45 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.8 | 49.8 | | mg/kg | 06.08.2020 17:45 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.8 | 49.8 | | mg/kg | 06.08.2020 17:45 | U | 1 |
| Total GRO-DRO | PHC628 | <49.8 | 49.8 | | mg/kg | 06.08.2020 17:45 | U | 1 |
| Total TPH | PHC635 | <49.8 | 49.8 | | mg/kg | 06.08.2020 17:45 | U | 1 |
| Surrogate | Ca | as Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|------------------|
| 1-Chlorooctane | 111-85-3 | 91 | % | 70-135 | 06.08.2020 17:45 |
| o-Terphenyl | 84-15-1 | 87 | % | 70-135 | 06.08.2020 17:45 |



LT Environmental, Inc., Arvada, CO

Wolverine SWD River

Sample Id: SS09 Matrix: Soil Date Received:06.08.2020 11:00

Lab Sample Id: 663699-009 Date Collected: 06.05.2020 14:52 Sample Depth: 6.5 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

540-36-3

Analyst: MAB Date Prep: 06.08.2020 13:14 Basis: Wet Weight

Seq Number: 3128312

1,4-Difluorobenzene

| Parameter | Cas Number | Result | \mathbf{RL} | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|---------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 19:28 | U | 1 |
| Toluene | 108-88-3 | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 19:28 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 19:28 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00396 | 0.00396 | | mg/kg | 06.08.2020 19:28 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 19:28 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 19:28 | U | 1 |
| Total BTEX | | < 0.00198 | 0.00198 | | mg/kg | 06.08.2020 19:28 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 98 | % | 70-130 | 06.08.2020 19:28 | | |

110

70-130

06.08.2020 19:28



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. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 663699



LT Environmental, Inc.

Wolverine SWD River

Analytical Method: Chloride by EPA 300

Seq Number: 3128315

7705029-1-BLK MB Sample Id:

LCS Sample Id:

Matrix: Solid

7705029-1-BKS

E300P Prep Method:

Date Prep: 06.08.2020

LCSD Sample Id: 7705029-1-BSD

LCS RPD MB Spike LCS Limits %RPD Units Analysis LCSD LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date

Chloride <10.0 250 252 101 253 90-110 0 20 06.08.2020 18:10 101 mg/kg

Analytical Method: Chloride by EPA 300

Seq Number: 3128315

663699-001 Parent Sample Id:

Matrix: Soil

663699-001 S MS Sample Id:

E300P Prep Method: Date Prep:

06.08.2020

MSD Sample Id: 663699-001 SD

Parent Spike MS MS MSD MSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result

06.08.2020 18:27 Chloride 7430 202 7620 94 7630 99 90-110 0 20 mg/kg

Analytical Method: Chloride by EPA 300

3128315 Seq Number:

Matrix: Soil

E300P Prep Method:

06.08.2020

Date Prep: 663704-002 S Parent Sample Id:

MS Sample Id: 663704-002

MSD Sample Id: 663704-002 SD

Spike **RPD Parent** MS MS %RPD Units MSD **MSD** Limits Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Chloride 201 20 06.08.2020 19:48 13.1 200 94 200 94 90-110 0 mg/kg

Analytical Method: TPH by SW8015 Mod

3128299 Seq Number:

Matrix: Solid

Prep Method:

SW8015P

06.08.2020

Date Prep: MB Sample Id: 7704998-1-BLK LCS Sample Id: 7704998-1-BKS LCSD Sample Id: 7704998-1-BSD

RPD MB Spike LCS LCS LCSD LCSD Limits %RPD Units Analysis **Parameter** Result Limit Date Result Amount %Rec %Rec Result Gasoline Range Hydrocarbons (GRO) 06.08.2020 13:38 35 < 50.0 1000 1000 100 1010 101 70-135 mg/kg 06.08.2020 13:38 Diesel Range Organics (DRO) 1010 101 70-135 0 35 < 50.0 1000 101 1010 mg/kg

LCS MBMB LCS LCSD Limits Units Analysis LCSD **Surrogate** Flag %Rec %Rec Flag Date Flag %Rec 06.08.2020 13:38 1-Chlorooctane 93 109 107 70-135 % 06.08.2020 13:38 o-Terphenyl 90 95 93 70-135 %

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128299

Parameter

Matrix: Solid

Prep Method:

SW8015P

Date Prep:

06.08.2020

MB Sample Id: 7704998-1-BLK

MBResult

Units

Analysis

Flag

Flag

Motor Oil Range Hydrocarbons (MRO)

< 50.0

mg/kg

Date 06.08.2020 13:17

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / B $RPD = 200* \mid (C-E) \mid (C+E) \mid$ [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result

= MS/LCS Result = MSD/LCSD Result MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

Flag

QC Summary 663699



LT Environmental, Inc.

Wolverine SWD River

Analytical Method: TPH by SW8015 Mod

SW8015P Prep Method:

Seg Number: 3128299 Date Prep:

06.08.2020

Parent Sample Id: 663699-002

MS Sample Id: 663699-002 S

Soil

Matrix:

MSD Sample Id: 663699-002 SD

RPD **Parent** Spike MS MS Limits %RPD Units Analysis MSD **MSD Parameter** Result Amount Result %Rec Result %Rec Limit Date Gasoline Range Hydrocarbons (GRO) < 50.0 1000 1090 109 9 35 06.08.2020 14:39 997 70-135 100 mg/kg 1010 70-135 8 06.08.2020 14:39 Diesel Range Organics (DRO) < 50.0 1000 1090 109 35 mg/kg 101

MS MS MSD Limits Units Analysis MSD **Surrogate** Flag Flag Date %Rec %Rec 06.08.2020 14:39 1-Chlorooctane 119 107 70-135 % 06.08.2020 14:39 o-Terphenyl 102 95 70-135 %

Analytical Method: BTEX by EPA 8021B

Prep Method:

SW5035A

Seq Number: MB Sample Id: 3128312

Matrix: Solid

Date Prep:

06.08.2020

7705033-1-BLK

LCS Sample Id: 7705033-1-BKS LCSD Sample Id: 7705033-1-BSD

MB Spike LCS LCS LCSD Limits %RPD **RPD** Units Analysis LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date 06.08.2020 15:03 111 35 Benzene 110 1

< 0.00200 0.100 0.111 0.110 70-130 mg/kg 06.08.2020 15:03 Toluene < 0.00200 0.100 0.107 107 0.105 105 70-130 2 35 mg/kg Ethylbenzene 0.100 0.100 100 0.0982 98 71-129 2 35 06.08.2020 15:03 < 0.00200 mg/kg 06.08.2020 15:03 m,p-Xylenes < 0.00400 0.200 0.208 104 0.203 102 70-135 2 35 mg/kg 06.08.2020 15:03 < 0.00200 0.100 0.105 105 0.103 103 71-133 2 35 o-Xylene mg/kg

Limits MB MB LCS LCS LCSD LCSD Units Analysis Surrogate %Rec Flag %Rec Flag Flag Date %Rec 06.08.2020 15:03 1,4-Difluorobenzene 108 110 107 70-130 % 06.08.2020 15:03 70-130 % 4-Bromofluorobenzene 94 97 93

Analytical Method: BTEX by EPA 8021B

3128312 Matrix: Soil Prep Method:

SW5035A

Flag

Seg Number: Parent Sample Id:

663699-001

MS Sample Id: 663699-001 S

Date Prep: 06.08.2020 MSD Sample Id: 663699-001 SD

RPD Parent Spike MS MS MSD **MSD** Limits %RPD Units Analysis **Parameter** Limit Date Result Amount Result %Rec %Rec Result 06.08.2020 15:44 < 0.00199 0.0996 0.116 116 0.121 70-130 4 35 Benzene 122 mg/kg 06.08.2020 15:44 70-130 35 Toluene < 0.00199 0.0996 0.112112 0.117 118 4 mg/kg Ethylbenzene < 0.00199 0.0996 0.105 105 0.108 109 71-129 3 35 06.08.2020 15:44 mg/kg 3 35 06.08.2020 15:44 m,p-Xylenes < 0.00398 0.199 0.218 110 0.225 114 70-135 mg/kg < 0.00199 0.0996 0.109 109 0.112 71-133 3 35 06.08.2020 15:44 o-Xylene 113 mg/kg

MS MS **MSD MSD** Limits Units Analysis Surrogate Flag Flag Date %Rec %Rec 06.08.2020 15:44 1,4-Difluorobenzene 108 109 70-130 % 06.08.2020 15:44 4-Bromofluorobenzene 97 98 70-130 %

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / B $RPD = 200* \mid (C-E) \mid (C+E) \mid$ [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result

= MS/LCS Result = MSD/LCSD Result

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

| Page | e 100 | of 52 | 9 |
|------|-------|-------|---|
| | (| 1 | |

Chain of Custody

Work Order No: 663697

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334

| Project Manager: Dan Moir Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com Page 1 Company Name: LT Environmental, Inc., Permian office Company Name: XTO Energy XTO Energy Work Order Comments Work Order Comments City, State ZIP: Midland, TX 79705 Address: 3104 E Green Street State of Project: State of Project: Reporting: Level III | Salou cinet Mores | 1.0 | 101 | | | 1000 | During |
|--|-------------------|------------------|--------------------|---|---------------------------|--|------------------|
| Dan Moir | Vork Order Notes | 8 | EST | ANAL YSIS REQU | Turn Around | Wolverine SWO Riser | roject Name: |
| Dan Moir Bill to: (if officent) Kyle Littrell | Ollier. | ADai - L | | | | | |
| Property of the Company Name: Dan Moir City, State ZIP: Carlsbad, NM (875-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-470-470-470-470-470-470-470-470-470-470 | Olbor I | AD-PT T | Deliverables: FDD | mo | Email: Idelval@ltenv.co | | none: |
| Property of the Property of th | RRP evel IV | Level III ST/UST | Reporting:Level II | Carlsbad, NM 88220 | City, State ZIP: | | |
| Dan Moir Dan Moir Bill to: (if different) LT Environmental, Inc., Permian office Salo North A Street Address: Address: Address: Address: Company Name: Street Company Name: Street Address: 3104 E Green Street | | | | | | Midland TX 7970s | City, State ZIP: |
| Dan Moir Bill to: (if different) LT Environmental, Inc., Permian office Company Name: XTO Energy Atlanta, GA (770-449-8800) Tampa, FL (813-813-813-813-813-813-813-813-813-813- | | | State of Project | 3104 E Green Street | Address: | 3300 North A Street | audicoo. |
| Dan Moir Bill to: (if different) LT Environmental, Inc., Permian office Company Name: XTO Energy XTO Energy XTO Energy | RC uperfund | PRP Brownfields | Program: USI/PS | Silv Linigy | | 2000 | Addrace. |
| Dan Moir Hobbs.NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com | | | | XTO Frerry | Company Name: | LT Environmental, Inc., Permian office | Company Name: |
| Dan Moir Rill to: (4 Affords) VALL 111-11 VALL VALL | nts | Work Order Comme | | | Circumstantial | | |
| Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) WMAN KENCO COM | 90 | | | Kulo I ittoli | Bill to if different | Dan Moir | Project Manager: |
| | op of | | (3-620-2000) | (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (81 | (575-392-7550) Phoenix,AZ | | |

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| Sugget 11116 |) . (c. po. (c.) | | 1101-116 | 111111111111111111111111111111111111111 | 111057 |
| | Received by: (Signature) | Relinquished by: (Signature) | Date/Time | Received by: (Signature) | Relinquished by: (Signature) |
| | tances beyond the control oviously negotiated. | by the client if such losses are due to circumst lyzed. These terms will be enforced unless pro | y for any losses or expenses incurred is sample submitted to Xenco, but not ana | Xenco. A minimum charge of \$76.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not enalyzed. These terms will be enforced unless previously negotiated. | Xenco. A minimum charge of \$76.00 will be |
| | rd torses and condition | filliates and subcontractors it assigns stands | der from client company to Xenco, its a | source: 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 to constitute a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard to constitute a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard to constitute a valid purchase order from client company to Xenco, its affiliates and subcontractors. | office: Signature of this document and relinque |
| 1631/245.7//4/0/7471:Ha | 19 = 0 | I By and Mi one will be and in the contract of | | | |

5504

Total 200.7 / 6010

200.8 / 6020:

8RCRA 13PPM Texas 11 Al Sb TCLP / SPLP 6010: 8RCRA Sb As Ba

As Ba

Be

8

Cd Ca Cr Co Cu Fe Pb

Mg

Mn Mo Ni

× Se Ag

SiO2 Na Sr Tl Sn U V Zn

1631 / 245.1 / 7470 / 7471 : Hg

Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U

1458 1442

Circle Method(s) and Metal(s) to be analyzed

5507 8508

5506

5505 8504

1422 1430 1436

1358 342 1333 1320

5503

2509

Sample Custody Seals:

Sample Identification

Matrix

Sampled

Time Sampled

Depth

Date

15120

6.5

Cooler Custody Seals: Received Intact:

Yes We Yes

N/A

Correction Factor:

10.2

Number of Containers

TPH (EPA 8015)

BTEX (EPA 0=8021)

Chloride (EPA 300.0)

0

Thermometer ID

Total Containers:

No

N/A

W S Temp Blank:

Yes

No

Wet Ice:

Yes

No

No

Sampler's Name:

Benjamin Belill

Sin

Due Date:

Rush: 48 ha Routine

SAMPLE RECEIPT

P.O. Number:

Project Number:

012920091

2007

Sample Comments

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

Work Order Notes

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 06.08.2020 11.00.00 AM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 663699

Analyst:

Temperature Measuring device used: T NM 007

Date: 06.08.2020

| | Sample Receipt Checklist | | Comments |
|--|--------------------------|-----|----------|
| #1 *Temperature of cooler(s)? | | 3.2 | |
| #2 *Shipping container in good condition? | | Yes | |
| #3 *Samples received on ice? | | Yes | |
| #4 *Custody Seals intact on shipping conta | iner/ 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 relinquish | ned/ received? | Yes | |
| #10 Chain of Custody agrees with sample I | abels/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)? | | Yes | |
| #18 Water VOC samples have zero headsp | pace? | N/A | |
| | | | |

| * Must be completed for after-hours deliver | v of samp | oles prior to | placing in the | he refrigerator |
|---|-----------------|--|----------------|-----------------|
| made be completed for ditor medic deliver | <i>,</i> 0. 0ap | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | p.aog t. | |

| Checklist completed by: | Martha Castro | Date: 06.08.2020 | |
|-------------------------|----------------|------------------|--|
| Checklist reviewed by: | lossing Yeamer | | |

PH Device/Lot#:

eurofins Environment Testing

Certificate of Analysis Summary 670249

LT Environmental, Inc., Arvada, CO

Project Name: ROW 4 Wolverine SWD Riser

Project Id:

Project Location:

012920091

Contact: Dan Moir

Date Received in Lab: Tue 08.18.2020 09:14

Report Date: 08.21.2020 17:44

Project Manager: Jessica Kramer

| | Lab Id: | 670249-0 | 001 | 670249-0 | 02 | 670249-0 | 003 | 670249-0 | 004 | 670249-0 | 005 | 670249-0 | 06 |
|------------------------------------|------------|------------|------------------|------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------|
| Analysis Requested | Field Id: | BH01 | l | BH01A | ١ | BH02 | | BH03 | | BH03A | | BH04 | |
| Anaiysis Requesieu | Depth: | 1- | | 3- | | 1- | | 2- | | 2.5- | | 1- | |
| | Matrix: | SOIL | , | SOIL | | SOIL | | SOIL | , | SOIL | | SOIL | |
| | Sampled: | 08.17.2020 | 09:54 | 08.17.2020 | 10:04 | 08.17.2020 | 11:35 | 08.17.2020 | 11:47 | 08.17.2020 | 11:49 | 08.17.2020 | 12:40 |
| BTEX by EPA 8021B | Extracted: | 08.18.2020 | 11:51 | 08.18.2020 | 11:51 | 08.18.2020 | 11:51 | 08.18.2020 | 11:51 | 08.18.2020 | 11:51 | 08.18.2020 | 11:51 |
| | Analyzed: | 08.18.2020 | 16:10 | 08.18.2020 | 16:33 | 08.18.2020 | 16:55 | 08.18.2020 | 17:18 | 08.18.2020 | 17:40 | 08.18.2020 | 18:03 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Benzene | | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 |
| Toluene | | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 |
| Ethylbenzene | | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 |
| m,p-Xylenes | | < 0.00398 | 0.00398 | < 0.00400 | 0.00400 | < 0.00399 | 0.00399 | < 0.00401 | 0.00401 | < 0.00402 | 0.00402 | < 0.00402 | 0.00402 |
| o-Xylene | | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 |
| Total Xylenes | | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 |
| Total BTEX | | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 |
| Chloride by EPA 300 | Extracted: | 08.18.2020 | 12:39 | 08.18.2020 | 12:39 | 08.18.2020 | 12:39 | 08.18.2020 | 12:39 | 08.18.2020 12:48 | | 08.18.2020 12:48 | |
| | Analyzed: | 08.18.2020 | 08.18.2020 14:37 | | 08.18.2020 14:43 | | 08.18.2020 14:54 | | 08.18.2020 15:27 | | 08.18.2020 15:44 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 4490 | 49.9 | 4500 | 50.0 | 2820 | 50.2 | 2120 | 49.9 | 1420 | 50.0 | 3160 | 50.0 |
| TPH by SW8015 Mod | Extracted: | 08.18.2020 | 09:50 | 08.18.2020 | 09:50 | 08.18.2020 09:50 | | 08.18.2020 09:50 | | 08.18.2020 09:50 | | 08.18.2020 | 09:50 |
| | Analyzed: | 08.18.2020 | 11:16 | 08.18.2020 | 12:37 | 08.18.2020 | 12:57 | 08.18.2020 | 13:17 | 08.18.2020 | 13:38 | 08.18.2020 | 13:58 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Gasoline Range Hydrocarbons (GRO) | | < 50.0 | 50.0 | < 50.0 | 50.0 | <49.8 | 49.8 | <49.9 | 49.9 | <49.9 | 49.9 | < 50.1 | 50.1 |
| Diesel Range Organics (DRO) | | < 50.0 | 50.0 | < 50.0 | 50.0 | <49.8 | 49.8 | <49.9 | 49.9 | <49.9 | 49.9 | < 50.1 | 50.1 |
| Motor Oil Range Hydrocarbons (MRO) | | < 50.0 | 50.0 | < 50.0 | 50.0 | <49.8 | 49.8 | <49.9 | 49.9 | <49.9 | 49.9 | <50.1 | 50.1 |
| Total GRO-DRO | | < 50.0 | 50.0 | < 50.0 | 50.0 | <49.8 | 49.8 | <49.9 | 49.9 | <49.9 | 49.9 | <50.1 | 50.1 |
| Total TPH | | < 50.0 | 50.0 | < 50.0 | 50.0 | <49.8 | 49.8 | <49.9 | 49.9 | <49.9 | 49.9 | <50.1 | 50.1 |

BRL - Below Reporting Limit

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

Jessica Weamer

eurofins Environment Testing

Certificate of Analysis Summary 670249

LT Environmental, Inc., Arvada, CO

Project Name: ROW 4 Wolverine SWD Riser

Project Id: Contact:

Project Location:

012920091

Dan Moir

Date Received in Lab: Tue 08.18.2020 09:14

Report Date: 08.21.2020 17:44

Project Manager: Jessica Kramer

| | I I | | | | 1 | | | | | | | |
|------------------------------------|------------|------------|---------|------------|---------|------------------|---------|------------------|---------|------------------|---------|--|
| | Lab Id: | 670249-0 | 007 | 670249-0 | 008 | 670249-0 | 009 | 670249- | 010 | 670249-0 | 11 | |
| Analysis Requested | Field Id: | BH05 | | BH054 | A | BH06 | | BH07 | | BH08 | | |
| Thurysis Requested | Depth: | 2- | | 3- | | 1- | | 1- | | 1- | | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | |
| | Sampled: | 08.17.2020 | 13:05 | 08.17.2020 | 13:10 | 08.17.2020 | 13:26 | 08.17.2020 | 14:10 | 08.17.2020 | 14:40 | |
| BTEX by EPA 8021B | Extracted: | 08.18.2020 | 11:51 | 08.18.2020 | 11:51 | 08.18.2020 | 11:51 | 08.18.2020 | 11:51 | 08.18.2020 | 11:51 | |
| | Analyzed: | 08.18.2020 | 18:25 | 08.18.2020 | 18:48 | 08.18.2020 | 19:10 | 08.18.2020 | 20:40 | 08.18.2020 | 21:08 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | |
| Benzene | | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | |
| Toluene | | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | |
| Ethylbenzene | | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | |
| m,p-Xylenes | | < 0.00398 | 0.00398 | < 0.00396 | 0.00396 | < 0.00398 | 0.00398 | < 0.00399 | 0.00399 | < 0.00398 | 0.00398 | |
| o-Xylene | | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | |
| Total Xylenes | | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | |
| Total BTEX | | < 0.00199 | 0.00199 | < 0.00198 | 0.00198 | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | < 0.00199 | 0.00199 | |
| Chloride by EPA 300 | Extracted: | 08.18.2020 | 12:48 | 08.18.2020 | 12:48 | 08.18.2020 | 12:48 | 08.18.2020 | 12:48 | 08.18.2020 | 12:48 | |
| | Analyzed: | 08.18.2020 | 15:50 | 08.18.2020 | 15:55 | 08.18.2020 | 16:01 | 08.18.2020 | 16:06 | 08.18.2020 | 16:23 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | |
| Chloride | | 206 | 9.92 | 374 | 9.96 | 578 | 9.98 | 5790 | 49.8 | 4130 | 49.9 | |
| TPH by SW8015 Mod | Extracted: | 08.18.2020 | 09:50 | 08.18.2020 | 09:50 | 08.18.2020 09:50 | | 08.18.2020 09:50 | | 08.18.2020 | 09:50 | |
| | Analyzed: | 08.18.2020 | 14:18 | 08.18.2020 | 14:38 | 08.18.2020 14:58 | | 08.18.2020 15:18 | | 08.18.2020 15:59 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | |
| Gasoline Range Hydrocarbons (GRO) | | < 50.2 | 50.2 | <49.9 | 49.9 | < 50.1 | 50.1 | < 50.2 | 50.2 | < 50.1 | 50.1 | |
| Diesel Range Organics (DRO) | | < 50.2 | 50.2 | <49.9 | 49.9 | < 50.1 | 50.1 | < 50.2 | 50.2 | <50.1 | 50.1 | |
| Motor Oil Range Hydrocarbons (MRO) | | < 50.2 | 50.2 | <49.9 | 49.9 | < 50.1 | 50.1 | < 50.2 | 50.2 | <50.1 | 50.1 | |
| Total GRO-DRO | | < 50.2 | 50.2 | <49.9 | 49.9 | < 50.1 | 50.1 | < 50.2 | 50.2 | <50.1 | 50.1 | |
| Total TPH | | < 50.2 | 50.2 | <49.9 | 49.9 | < 50.1 | 50.1 | < 50.2 | 50.2 | <50.1 | 50.1 | |

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 670249

for

LT Environmental, Inc.

Project Manager: Dan Moir

ROW 4 Wolverine SWD Riser 012920091 08.21.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



08.21.2020

Project Manager: **Dan Moir LT Environmental, Inc.**4600 W. 60th Avenue
Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 670249

ROW 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 670249. 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 Eurofins Xenco, LLC. 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. 670249 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 670249

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| BH01 | S | 08.17.2020 09:54 | 1 | 670249-001 |
| BH01A | S | 08.17.2020 10:04 | 3 | 670249-002 |
| BH02 | S | 08.17.2020 11:35 | 1 | 670249-003 |
| BH03 | S | 08.17.2020 11:47 | 2 | 670249-004 |
| BH03A | S | 08.17.2020 11:49 | 2.5 | 670249-005 |
| BH04 | S | 08.17.2020 12:40 | 1 | 670249-006 |
| BH05 | S | 08.17.2020 13:05 | 2 | 670249-007 |
| BH05A | S | 08.17.2020 13:10 | 3 | 670249-008 |
| BH06 | S | 08.17.2020 13:26 | 1 | 670249-009 |
| BH07 | S | 08.17.2020 14:10 | 1 | 670249-010 |
| BH08 | S | 08.17.2020 14:40 | 1 | 670249-011 |

Page 107 of 520

CASE NARRATIVE

eurofins **Environment Testing** Xenco

Client Name: LT Environmental, Inc. Project Name: ROW 4 Wolverine SWD Riser

Project ID: Report Date: 08.21.2020 012920091 Work Order Number(s): 670249 Date Received: 08.18.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: **BH01** Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-001 Date Collected: 08.17.2020 09:54 Sample Depth: 1

Prep Method: E300P

Analytical Method: Chloride by EPA 300 Tech: MAB

% Moisture:

MAB Analyst: Date Prep: 08.18.2020 12:39 Basis: Wet Weight

Seq Number: 3134917

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 4490 | 49.9 | mg/kg | 08.18.2020 14:37 | | 5 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

DTH % Moisture: Tech:

Analyst: DTH Basis: Wet Weight Date Prep: 08.18.2020 09:50

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.0 | 50.0 | | mg/kg | 08.18.2020 11:16 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.0 | 50.0 | | mg/kg | 08.18.2020 11:16 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.0 | 50.0 | | mg/kg | 08.18.2020 11:16 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.0 | 50.0 | | mg/kg | 08.18.2020 11:16 | U | 1 |
| Total TPH | PHC635 | < 50.0 | 50.0 | | mg/kg | 08.18.2020 11:16 | U | 1 |
| Surrogate | (| Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | Fl |
|----------------|------------|------------|-------|--------|----------------------|----|
| 1-Chlorooctane | 111-85-3 | 97 | % | 70-135 | 08.18.2020 11:16 | |
| o-Terphenyl | 84-15-1 | 92 | % | 70-135 | 08.18.2020 11:16 | |



LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH01 Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-001 Date Collected: 08.17.2020 09:54 Sample Depth: 1

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

540-36-3

Analyst: MAB Date Prep: 08.18.2020 11:51 Basis: Wet Weight

Seq Number: 3134914

1,4-Difluorobenzene

| | | | | | | • | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 16:10 | U | 1 |
| Toluene | 108-88-3 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 16:10 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 16:10 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00398 | 0.00398 | | mg/kg | 08.18.2020 16:10 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 16:10 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 16:10 | U | 1 |
| Total BTEX | | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 16:10 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 94 | % | 70-130 | 08.18.2020 16:10 | | |

94

%

70-130

08.18.2020 16:10



LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH01A Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-002 Date Collected: 08.17.2020 10:04 Sample Depth: 3

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 08.18.2020 12:39 Basis: Wet Weight

Seq Number: 3134917

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 4500 | 50.0 | mg/kg | 08.18.2020 14:43 | | 5 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 08.18.2020 09:50 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.0 | 50.0 | | mg/kg | 08.18.2020 12:37 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.0 | 50.0 | | mg/kg | 08.18.2020 12:37 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.0 | 50.0 | | mg/kg | 08.18.2020 12:37 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.0 | 50.0 | | mg/kg | 08.18.2020 12:37 | U | 1 |
| Total TPH | PHC635 | < 50.0 | 50.0 | | mg/kg | 08.18.2020 12:37 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | |
|----------------|------------|------------|-------|--------|------------------|--|
| 1-Chlorooctane | 111-85-3 | 97 | % | 70-135 | 08.18.2020 12:37 | |
| o-Terphenyl | 84-15-1 | 92 | % | 70-135 | 08.18.2020 12:37 | |



LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH01A Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-002 Date Collected: 08.17.2020 10:04 Sample Depth: 3

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 08.18.2020 11:51 Basis: Wet Weight

| Parameter | Cas Number | Result | \mathbf{RL} | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|---------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:33 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:33 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:33 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00400 | 0.00400 | | mg/kg | 08.18.2020 16:33 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:33 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:33 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:33 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 88 | % | 70-130 | 08.18.2020 16:33 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 101 | % | 70-130 | 08.18.2020 16:33 | | |



LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: **BH02** Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-003 Date Collected: 08.17.2020 11:35 Sample Depth: 1

Analytical Method: Chloride by EPA 300 Prep Method: E300P

% Moisture:

% Moisture:

Tech: MAB MAB Analyst: Date Prep: 08.18.2020 12:39 Basis: Wet Weight

Seq Number: 3134917

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|----------------------|------|-----|
| Chloride | 16887-00-6 | 2820 | 50.2 | mg/kg | 08.18.2020 14:48 | | 5 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

DTH Tech:

Analyst: DTH Basis: Wet Weight Date Prep: 08.18.2020 09:50

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|-----------|------------|------------|-------|--------|----------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.8 | 49.8 | | mg/kg | 08.18.2020 12:57 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.8 | 49.8 | | mg/kg | 08.18.2020 12:57 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.8 | 49.8 | | mg/kg | 08.18.2020 12:57 | U | 1 |
| Total GRO-DRO | PHC628 | <49.8 | 49.8 | | mg/kg | 08.18.2020 12:57 | U | 1 |
| Total TPH | PHC635 | <49.8 | 49.8 | | mg/kg | 08.18.2020 12:57 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1-Chlorooctane | | 111-85-3 | 90 | % | 70-135 | 08.18.2020 12:57 | | |
| o-Terphenyl | | 84-15-1 | 86 | % | 70-135 | 08.18.2020 12:57 | | |

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: **BH02** Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-003 Date Collected: 08.17.2020 11:35 Sample Depth: 1

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

MAB Analyst: Date Prep: 08.18.2020 11:51 Basis: Wet Weight

Seq Number: 3134914

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:55 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:55 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:55 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00399 | 0.00399 | | mg/kg | 08.18.2020 16:55 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:55 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:55 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 16:55 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene | | 540-36-3 | 101 | % | 70-130 | 08.18.2020 16:55 | | |
| 4-Bromofluorobenzene | | 460-00-4 | 91 | % | 70-130 | 08.18.2020 16:55 | | |

Xenco

BH03

Certificate of Analytical Results 670249

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Soil

Sample Id: Date Received:08.18.2020 09:14

Lab Sample Id: 670249-004 Date Collected: 08.17.2020 11:47 Sample Depth: 2

Matrix:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

MAB % Moisture:

MAB Analyst: Date Prep: 08.18.2020 12:39 Basis: Wet Weight

Seq Number: 3134917

Tech:

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 2120 | 49.9 | mg/kg | 08.18.2020 14:54 | | 5 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

DTH % Moisture: Tech:

Analyst: DTH Basis: Wet Weight Date Prep: 08.18.2020 09:50

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|-----------|------------|------------|-------|--------|----------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.9 | 49.9 | | mg/kg | 08.18.2020 13:17 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.9 | 49.9 | | mg/kg | 08.18.2020 13:17 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.9 | 49.9 | | mg/kg | 08.18.2020 13:17 | U | 1 |
| Total GRO-DRO | PHC628 | <49.9 | 49.9 | | mg/kg | 08.18.2020 13:17 | U | 1 |
| Total TPH | PHC635 | <49.9 | 49.9 | | mg/kg | 08.18.2020 13:17 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1-Chlorooctane | | 111-85-3 | 91 | % | 70-135 | 08.18.2020 13:17 | | |
| o-Terphenyl | | 84-15-1 | 86 | % | 70-135 | 08.18.2020 13:17 | | |

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH03 Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-004 Date Collected: 08.17.2020 11:47 Sample Depth: 2

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 08.18.2020 11:51 Basis: Wet Weight

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 17:18 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 17:18 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 17:18 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00401 | 0.00401 | | mg/kg | 08.18.2020 17:18 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 17:18 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 17:18 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 17:18 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 95 | % | 70-130 | 08.18.2020 17:18 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 103 | % | 70-130 | 08.18.2020 17:18 | | |

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH03A Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-005 Date Collected: 08.17.2020 11:49 Sample Depth: 2.5

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 08.18.2020 12:48 Basis: Wet Weight

Seq Number: 3134919

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|----------------------|------|-----|
| Chloride | 16887-00-6 | 1420 | 50.0 | mg/kg | 08.18.2020 15:27 | | |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 08.18.2020 09:50 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|----------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.9 | 49.9 | | mg/kg | 08.18.2020 13:38 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.9 | 49.9 | | mg/kg | 08.18.2020 13:38 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.9 | 49.9 | | mg/kg | 08.18.2020 13:38 | U | 1 |
| Total GRO-DRO | PHC628 | <49.9 | 49.9 | | mg/kg | 08.18.2020 13:38 | U | 1 |
| Total TPH | PHC635 | <49.9 | 49.9 | | mg/kg | 08.18.2020 13:38 | U | 1 |
| Surrogate | • | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | |
|----------------|------------|------------|-------|--------|----------------------|--|
| 1-Chlorooctane | 111-85-3 | 89 | % | 70-135 | 08.18.2020 13:38 | |
| o-Terphenyl | 84-15-1 | 85 | % | 70-135 | 08.18.2020 13:38 | |

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH03A Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-005 Date Collected: 08.17.2020 11:49 Sample Depth: 2.5

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

540-36-3

Analyst: MAB Date Prep: 08.18.2020 11:51 Basis: Wet Weight

Seq Number: 3134914

1,4-Difluorobenzene

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 17:40 | U | 1 |
| Toluene | 108-88-3 | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 17:40 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 17:40 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00402 | 0.00402 | | mg/kg | 08.18.2020 17:40 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 17:40 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 17:40 | U | 1 |
| Total BTEX | | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 17:40 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 97 | % | 70-130 | 08.18.2020 17:40 | | |

103

%

70-130

08.18.2020 17:40

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH04 Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-006 Date Collected: 08.17.2020 12:40 Sample Depth: 1

Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 08.18.2020 12:48 Basis: Wet Weight

Seq Number: 3134919

Analytical Method: Chloride by EPA 300

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 3160 | 50.0 | mg/kg | 08.18.2020 15:44 | | | _ |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 08.18.2020 09:50 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|----------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.1 | 50.1 | | mg/kg | 08.18.2020 13:58 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.1 | 50.1 | | mg/kg | 08.18.2020 13:58 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.1 | 50.1 | | mg/kg | 08.18.2020 13:58 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.1 | 50.1 | | mg/kg | 08.18.2020 13:58 | U | 1 |
| Total TPH | PHC635 | < 50.1 | 50.1 | | mg/kg | 08.18.2020 13:58 | U | 1 |
| Surrogate | • | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | |
|----------------|------------|------------|-------|--------|----------------------|--|
| 1-Chlorooctane | 111-85-3 | 88 | % | 70-135 | 08.18.2020 13:58 | |
| o-Terphenyl | 84-15-1 | 84 | % | 70-135 | 08.18.2020 13:58 | |



LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH04 Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-006 Date Collected: 08.17.2020 12:40 Sample Depth: 1

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 08.18.2020 11:51 Basis: Wet Weight

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 18:03 | U | 1 |
| Toluene | 108-88-3 | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 18:03 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 18:03 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00402 | 0.00402 | | mg/kg | 08.18.2020 18:03 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 18:03 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 18:03 | U | 1 |
| Total BTEX | | < 0.00201 | 0.00201 | | mg/kg | 08.18.2020 18:03 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 91 | % | 70-130 | 08.18.2020 18:03 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 101 | % | 70-130 | 08.18.2020 18:03 | | |



LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH05 Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-007 Date Collected: 08.17.2020 13:05 Sample Depth: 2

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 08.18.2020 12:48 Basis: Wet Weight

Seq Number: 3134919

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 206 | 9.92 | mg/kg | 08.18.2020 15:50 | | 1 | _ |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 08.18.2020 09:50 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.2 | 50.2 | | mg/kg | 08.18.2020 14:18 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.2 | 50.2 | | mg/kg | 08.18.2020 14:18 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.2 | 50.2 | | mg/kg | 08.18.2020 14:18 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.2 | 50.2 | | mg/kg | 08.18.2020 14:18 | U | 1 |
| Total TPH | PHC635 | < 50.2 | 50.2 | | mg/kg | 08.18.2020 14:18 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | |
|----------------|------------|------------|-------|--------|----------------------|--|
| 1-Chlorooctane | 111-85-3 | 87 | % | 70-135 | 08.18.2020 14:18 | |
| o-Terphenyl | 84-15-1 | 82 | % | 70-135 | 08.18.2020 14:18 | |



LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH05 Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-007 Date Collected: 08.17.2020 13:05 Sample Depth: 2

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

540-36-3

Analyst: MAB Date Prep: 08.18.2020 11:51 Basis: Wet Weight

Seq Number: 3134914

1,4-Difluorobenzene

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 18:25 | U | 1 |
| Toluene | 108-88-3 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 18:25 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 18:25 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00398 | 0.00398 | | mg/kg | 08.18.2020 18:25 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 18:25 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 18:25 | U | 1 |
| Total BTEX | | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 18:25 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | 4 | 160-00-4 | 94 | % | 70-130 | 08.18.2020 18:25 | | |

102

%

70-130

08.18.2020 18:25

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH05A Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-008 Date Collected: 08.17.2020 13:10 Sample Depth: 3

Analytical Method: Chloride by EPA 300 Prep Method: E300P

% Moisture:

% Moisture:

Analyst: MAB Date Prep: 08.18.2020 12:48 Basis: Wet Weight

Seq Number: 3134919

MAB

Tech:

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|----------------------|------|-----|
| Chloride | 16887-00-6 | 374 | 9.96 | mg/kg | 08.18.2020 15:55 | | 1 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH

Analyst: DTH Date Prep: 08.18.2020 09:50 Basis: Wet Weight

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|-----------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.9 | 49.9 | | mg/kg | 08.18.2020 14:38 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.9 | 49.9 | | mg/kg | 08.18.2020 14:38 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.9 | 49.9 | | mg/kg | 08.18.2020 14:38 | U | 1 |
| Total GRO-DRO | PHC628 | <49.9 | 49.9 | | mg/kg | 08.18.2020 14:38 | U | 1 |
| Total TPH | PHC635 | <49.9 | 49.9 | | mg/kg | 08.18.2020 14:38 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1-Chlorooctane | | 111-85-3 | 90 | % | 70-135 | 08.18.2020 14:38 | | |
| o-Terphenyl | | 84-15-1 | 85 | % | 70-135 | 08.18.2020 14:38 | | |

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH05A Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-008 Date Collected: 08.17.2020 13:10 Sample Depth: 3

Prep Method: SW5035A

08.18.2020 18:48

% Moisture:

Tech: MAB MAB Analyst: Date Prep: 08.18.2020 11:51 Basis: Wet Weight

540-36-3

Seq Number: 3134914

1,4-Difluorobenzene

Analytical Method: BTEX by EPA 8021B

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00198 | 0.00198 | | mg/kg | 08.18.2020 18:48 | U | 1 |
| Toluene | 108-88-3 | < 0.00198 | 0.00198 | | mg/kg | 08.18.2020 18:48 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00198 | 0.00198 | | mg/kg | 08.18.2020 18:48 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00396 | 0.00396 | | mg/kg | 08.18.2020 18:48 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00198 | 0.00198 | | mg/kg | 08.18.2020 18:48 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00198 | 0.00198 | | mg/kg | 08.18.2020 18:48 | U | 1 |
| Total BTEX | | < 0.00198 | 0.00198 | | mg/kg | 08.18.2020 18:48 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 93 | % | 70-130 | 08.18.2020 18:48 | | |

103

%

70-130

Xenco

Certificate of Analytical Results 670249

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH06 Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-009 Date Collected: 08.17.2020 13:26 Sample Depth: 1

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 08.18.2020 12:48 Basis: Wet Weight

Seq Number: 3134919

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 578 | 9 98 | mo/ko | 08 18 2020 16:01 | | 1 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

84-15-1

Analyst: DTH Date Prep: 08.18.2020 09:50 Basis: Wet Weight

Seq Number: 3134923

o-Terphenyl

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.1 | 50.1 | | mg/kg | 08.18.2020 14:58 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.1 | 50.1 | | mg/kg | 08.18.2020 14:58 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.1 | 50.1 | | mg/kg | 08.18.2020 14:58 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.1 | 50.1 | | mg/kg | 08.18.2020 14:58 | U | 1 |
| Total TPH | PHC635 | <50.1 | 50.1 | | mg/kg | 08.18.2020 14:58 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1-Chlorooctane | | 111-85-3 | 90 | % | 70-135 | 08.18.2020 14:58 | | |

85

70-135

08.18.2020 14:58



LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH06 Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-009 Date Collected: 08.17.2020 13:26 Sample Depth: 1

Prep Method: SW5035A

08.18.2020 19:10

Tech: MAB % Moisture:

460-00-4

Analyst: MAB Date Prep: 08.18.2020 11:51 Basis: Wet Weight

Seq Number: 3134914

4-Bromofluorobenzene

Analytical Method: BTEX by EPA 8021B

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|---------------------|-------------|------------|------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 19:10 | U | 1 |
| Toluene | 108-88-3 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 19:10 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 19:10 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00398 | 0.00398 | | mg/kg | 08.18.2020 19:10 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 19:10 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 19:10 | U | 1 |
| Total BTEX | | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 19:10 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene | : | 540-36-3 | 102 | % | 70-130 | 08.18.2020 19:10 | | |

95

%

70-130

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Soil

Sample Id: Date Received:08.18.2020 09:14

Lab Sample Id: 670249-010 Date Collected: 08.17.2020 14:10 Sample Depth: 1

Analytical Method: Chloride by EPA 300

BH07

Tech: MAB

MAB Analyst: Date Prep: 08.18.2020 12:48 Basis: Wet Weight

Date Prep:

Matrix:

Seq Number: 3134919

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 5790 | 49.8 | mg/kg | 08.18.2020 16:06 | | 5 |

Analytical Method: TPH by SW8015 Mod

DTH Tech:

Analyst:

DTH Seq Number: 3134923 Prep Method: SW8015P

% Moisture:

08.18.2020 09:50

Basis:

Prep Method: E300P

% Moisture:

Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.2 | 50.2 | | mg/kg | 08.18.2020 15:18 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.2 | 50.2 | | mg/kg | 08.18.2020 15:18 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.2 | 50.2 | | mg/kg | 08.18.2020 15:18 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.2 | 50.2 | | mg/kg | 08.18.2020 15:18 | U | 1 |
| Total TPH | PHC635 | <50.2 | 50.2 | | mg/kg | 08.18.2020 15:18 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1 (11) | | 111 05 2 | 0.1 | 0/ | 70 125 | 00 10 2020 15 10 | | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|------------------|
| 1-Chlorooctane | 111-85-3 | 91 | % | 70-135 | 08.18.2020 15:18 |
| o-Terphenyl | 84-15-1 | 87 | % | 70-135 | 08.18.2020 15:18 |

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH07 Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-010 Date Collected: 08.17.2020 14:10 Sample Depth: 1

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 08.18.2020 11:51 Basis: Wet Weight

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 20:40 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 20:40 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 20:40 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00399 | 0.00399 | | mg/kg | 08.18.2020 20:40 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 20:40 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 20:40 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 08.18.2020 20:40 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 91 | % | 70-130 | 08.18.2020 20:40 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 103 | % | 70-130 | 08.18.2020 20:40 | | |

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: BH08 Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-011 Date Collected: 08.17.2020 14:40 Sample Depth: 1

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 08.18.2020 12:48 Basis: Wet Weight

Seq Number: 3134919

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|--|
| Chloride | 16887-00-6 | 4130 | 49.9 | mg/kg | 08.18.2020 16:23 | | 5 | |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 08.18.2020 09:50 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.1 | 50.1 | | mg/kg | 08.18.2020 15:59 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.1 | 50.1 | | mg/kg | 08.18.2020 15:59 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.1 | 50.1 | | mg/kg | 08.18.2020 15:59 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.1 | 50.1 | | mg/kg | 08.18.2020 15:59 | U | 1 |
| Total TPH | PHC635 | < 50.1 | 50.1 | | mg/kg | 08.18.2020 15:59 | U | 1 |
| Surrogate | (| Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|----------------------|
| 1-Chlorooctane | 111-85-3 | 88 | % | 70-135 | 08.18.2020 15:59 |
| o-Terphenyl | 84-15-1 | 84 | % | 70-135 | 08.18.2020 15:59 |

LT Environmental, Inc., Arvada, CO

ROW 4 Wolverine SWD Riser

Sample Id: **BH08** Matrix: Soil Date Received:08.18.2020 09:14

Lab Sample Id: 670249-011 Date Collected: 08.17.2020 14:40 Sample Depth: 1

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

MAB Analyst: Date Prep: 08.18.2020 11:51 Basis: Wet Weight

Seq Number: 3134914

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 21:08 | U | 1 |
| Toluene | 108-88-3 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 21:08 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 21:08 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00398 | 0.00398 | | mg/kg | 08.18.2020 21:08 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 21:08 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 21:08 | U | 1 |
| Total BTEX | | < 0.00199 | 0.00199 | | mg/kg | 08.18.2020 21:08 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 83 | % | 70-130 | 08.18.2020 21:08 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 98 | % | 70-130 | 08.18.2020 21:08 | | |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

^{**} Surrogate recovered outside laboratory control limit.

RPD

Prep Method:

Prep Method:

Prep Method:

RPD

Units

E300P

E300P

E300P

Analysis

Flag

%RPD

Limits

LCSD

Parameter

QC Summary 670249

LT Environmental, Inc.

LCSD

ROW 4 Wolverine SWD Riser

Spike

MB

E300P Analytical Method: Chloride by EPA 300 Prep Method: 3134917 Seg Number: Matrix: Solid Date Prep: 08.18.2020

LCS

LCS Sample Id: 7709666-1-BKS LCSD Sample Id: 7709666-1-BSD MB Sample Id: 7709666-1-BLK LCS

Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 259 104 261 90-110 20 08.18.2020 12:12 104 1 mg/kg

Analytical Method: Chloride by EPA 300

Prep Method: Seq Number: 3134919 Matrix: Solid Date Prep: 08.18.2020

LCS Sample Id: 7709667-1-BKS LCSD Sample Id: 7709667-1-BSD MB Sample Id: 7709667-1-BLK

MB Spike LCS LCS LCSD LCSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result

20 08.18.2020 15:16 Chloride <10.0 250 261 104 263 105 90-110 1 mg/kg

Analytical Method: Chloride by EPA 300

3134917 Seq Number: Matrix: Soil Date Prep: 08.18.2020

MS Sample Id: 670227-001 S MSD Sample Id: 670227-001 SD Parent Sample Id: 670227-001

Spike **RPD Parent** MS MS %RPD Units MSD **MSD** Limits Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Chloride 0 20 08.18.2020 12:29 2680 199 2870 95 2870 95 90-110 mg/kg

Analytical Method: Chloride by EPA 300

3134917 Matrix: Soil 08.18.2020 Seq Number: Date Prep:

Parent Sample Id: 670227-011 MS Sample Id: 670227-011 S MSD Sample Id: 670227-011 SD

RPD Parent Spike MS MS MSD MSD Limits %RPD Units Analysis Flag **Parameter** Result Limit Date Result Amount %Rec %Rec Result 08.18.2020 13:47 Chloride 95 20 1370 200 1560 95 1560 90-110 0 mg/kg

Analytical Method: Chloride by EPA 300

E300P Prep Method: 3134919 Matrix: Soil 08.18.2020 Seq Number: Date Prep:

670249-005 S 670249-005 SD Parent Sample Id: 670249-005 MS Sample Id: MSD Sample Id:

Parent Spike MS MS Limits %RPD RPD Units Analysis MSD MSD Flag **Parameter** Result Limit Date Result Amount %Rec Result %Rec

08.18.2020 15:33 20 Chloride 1420 198 1630 106 1600 90 90-110 2 mg/kg

Analytical Method: Chloride by EPA 300

Parent

3134919 08.18.2020 Seq Number: Matrix: Soil Date Prep:

670314-004 S 670314-004 SD MS Sample Id: MSD Sample Id: Parent Sample Id: 670314-004 MS

MS

Spike **MSD** MSD Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec 08.18.2020 16:51 93 0 20 Chloride 2140 247 2370 2380 90-110 mg/kg

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / BRPD = 200* | (C-E) / (C+E) |[D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result

%RPD

Limits

= MS/LCS Result = MSD/LCSD Result

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

Analysis

E300P

Units

Flag

Flag

Flag

08.18.2020 10:35

08.18.2020 10:35

1-Chlorooctane

o-Terphenyl

QC Summary 670249

LT Environmental, Inc. ROW 4 Wolverine SWD Riser

112

98

70-135

70-135

%

Analytical Method:TPH by SW8015 ModPrep Method:SW8015PSeq Number:3134923Matrix:SolidDate Prep:08.18.2020

MB Sample Id: 7709645-1-BLK LCS Sample Id: 7709645-1-BKS LCSD Sample Id: 7709645-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | F |
|-----------------------------------|--------------|-----------------|---------------|-------------|----------------|--------------|--------|------|--------------|-------|------------------|---|
| Gasoline Range Hydrocarbons (GRO) | < 50.0 | 1000 | 979 | 98 | 956 | 96 | 70-135 | 2 | 35 | mg/kg | 08.18.2020 10:35 | |
| Diesel Range Organics (DRO) | < 50.0 | 1000 | 1010 | 101 | 971 | 97 | 70-135 | 4 | 35 | mg/kg | 08.18.2020 10:35 | |
| Surrogate | MB %Rec | MB Flag | | | LCS Flag | LCSI %Re | | | mits | Units | Analysis Date | |

Analytical Method:TPH by SW8015 ModPrep Method:SW8015PSeq Number:3134923Matrix:SolidDate Prep:08.18.2020

116

101

MB Sample Id: 7709645-1-BLK

87

83

 Parameter
 MB Result
 Units Date
 Analysis Date
 Flag

 Motor Oil Range Hydrocarbons (MRO)
 <50.0</td>
 mg/kg
 08.18.2020 10:15

 Analytical Method:
 TPH by SW8015 Mod
 Prep Method:
 SW8015P

 Seq Number:
 3134923
 Matrix:
 Soil
 Date Prep:
 08.18.2020

 Parent Sample Id:
 670249-001
 MS Sample Id:
 670249-001 S
 MSD Sample Id:
 670249-001 SD

Parent Spike MS MS %RPD RPD Units MSD MSD Limits Analysis **Parameter** Result Result Limit Amount %Rec Result %Rec Date 08.18.2020 11:36 Gasoline Range Hydrocarbons (GRO) <49.9 998 859 86 879 70-135 2 35 mg/kg 88 08.18.2020 11:36 Diesel Range Organics (DRO) <49.9 998 882 88 889 89 70-135 1 35 mg/kg

MSD MS MS Units Analysis **MSD** Limits **Surrogate** %Rec Flag Flag Date %Rec 08.18.2020 11:36 104 106 70-135 1-Chlorooctane % 08.18.2020 11:36 o-Terphenyl 92 93 70-135 %

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3134914Matrix:SolidDate Prep:08.18.2020

MB Sample Id: 7709668-1-BLK LCS Sample Id: 7709668-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date |
|--------------|--------------|-----------------|---------------|-------------|----------------|--------------|--------|------|--------------|-------|------------------|
| Benzene | < 0.00200 | 0.100 | 0.100 | 100 | 0.108 | 108 | 70-130 | 8 | 35 | mg/kg | 08.18.2020 13:38 |
| Toluene | < 0.00200 | 0.100 | 0.0965 | 97 | 0.104 | 104 | 70-130 | 7 | 35 | mg/kg | 08.18.2020 13:38 |
| Ethylbenzene | < 0.00200 | 0.100 | 0.0901 | 90 | 0.0969 | 97 | 71-129 | 7 | 35 | mg/kg | 08.18.2020 13:38 |
| m,p-Xylenes | < 0.00400 | 0.200 | 0.182 | 91 | 0.197 | 99 | 70-135 | 8 | 35 | mg/kg | 08.18.2020 13:38 |
| o-Xylene | < 0.00200 | 0.100 | 0.0894 | 89 | 0.0956 | 96 | 71-133 | 7 | 35 | mg/kg | 08.18.2020 13:38 |

| Surrogate | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date |
|----------------------|------------|------------|-------------|-------------|--------------|--------------|--------|-------|------------------|
| 1,4-Difluorobenzene | 97 | | 99 | | 98 | | 70-130 | % | 08.18.2020 13:38 |
| 4-Bromofluorobenzene | 87 | | 94 | | 94 | | 70-130 | % | 08.18.2020 13:38 |

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference [D] = 100*(C-A) / B RPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec 1,4-Difluorobenzene

4-Bromofluorobenzene

08.18.2020 19:55

08.18.2020 19:55

QC Summary 670249



LT Environmental, Inc. ROW 4 Wolverine SWD Riser

99

88

70-130

70-130

%

 Analytical Method:
 BTEX by EPA 8021B
 Prep Method:
 SW5035A

 Seq Number:
 3134914
 Matrix:
 Soil
 Date Prep:
 08.18.2020

 Parent Sample Id:
 670249-001
 MS Sample Id:
 670249-001 S
 MSD Sample Id:
 670249-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|--------------|------------------|-----------------|--------------|------------|---------------|-------------|--------|------|--------------|-------|------------------|------|
| Benzene | < 0.00200 | 0.0998 | 0.112 | 112 | 0.108 | 108 | 70-130 | 4 | 35 | mg/kg | 08.18.2020 19:55 | |
| Toluene | < 0.00200 | 0.0998 | 0.109 | 109 | 0.103 | 103 | 70-130 | 6 | 35 | mg/kg | 08.18.2020 19:55 | |
| Ethylbenzene | < 0.00200 | 0.0998 | 0.101 | 101 | 0.0957 | 96 | 71-129 | 5 | 35 | mg/kg | 08.18.2020 19:55 | |
| m,p-Xylenes | < 0.00399 | 0.200 | 0.206 | 103 | 0.194 | 97 | 70-135 | 6 | 35 | mg/kg | 08.18.2020 19:55 | |
| o-Xylene | < 0.00200 | 0.0998 | 0.102 | 102 | 0.0962 | 96 | 71-133 | 6 | 35 | mg/kg | 08.18.2020 19:55 | |
| Surrogate | | | | IS Rec | MS Flag | MSD %Re | | | imits | Units | Analysis Date | |

99

93

| Page 134 of 5 | 20 |
|---------------|----|

Address:

3300 North A St. Bldg 1, Unit 222 LT Environmental, Inc., Permian office

Address:

3104 E Greene St XTO Energy Kyle Littrell

Program: UST/PST PRP Brownfields RC

uperfund

www.xenco.com

Page

9

Work Order Comments

State of Project: NM

Bill to: (if different) Company Name:

Project Manager: Company Name:

Dan Moir



Chain of Custody

Work Order No: 670249

Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) 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

| Project Number: O12920091 Routine P.O. Number: Rush: | City, State ZIP: Phone: Project Name: | Midland, TX 79705 (432) 701-2610 RDW 4 Wolverine | 79705 10 Jolverine | SWD | Email | City, State ZIP: Carlsbad, NIM Email: dmoir@ltenv.com rmcafee@ltenv.com Turn Around | V.com m | | Carlsbad, NM rmcafee@lte |
|--|---|--|---|--|---|---|---|------------------------------------|-----------------------------|
| LERECEIPT Temp Blank: (Yes) No Wet Ice: Yes) No Infact: Yes) No Thermometer ID Infact: Yes | | 01292 Robert McAfe | -0091 | | Rush Due | tine M | | | |
| Exceived Intact: Composition Correction Factor: Cooperation Cooperatio | SAMPLE RECEI | | mp Blank: | (Veg) | Wet Ice: | Yes | rs | | |
| Yes No N/A Correction Factor: -O. a for some place of \$5 for each sample and shall not assume any responsibility for any losses or expension signature) Yes No N/A Total Containers: 11 Total Containers: 11 Total Containers: 11 Total Containers: 11 Sampled Sampled Sampled Depth 2 | eceived Intact: | (30x) | | 1-1 | 200 | 110 | taine | | |
| Imple Custody Seals: Yes No N/A Total Containers: 11 Sample Identification Matrix Date Sampled Sampled Sampled Sampled Date Time Date Date Date Time Date Date Date Date Date Date Date Dat | Cooler Custody Seals: | Yes | 9/ | Corn | ection Factor: | 0 | | | |
| Sample Identification Matrix Sampled Sampled Sampled Date Time Sampled Date Time Sampled Date Time Sampled Date Time Date Date Date Time Date Time Date Time Date Date Time Date Date Time Date | ample Custody Seals | Yes | - | Tota | Containers: | h | | - | |
| BHO1 S 08/14/20 0954 1' | Sample Identi | lification | Matrix | Date Sampled | Time Sampled | Depth | | | |
| BH02 BH03 BH03 BH03A BH05A BH0 | 8 HO! | | 0 | | | 1' | | | |
| BHO2 BHO3A BHO3A BHO3A BHO3A BHO5A B | BHOIA | | | | 1004 | 31 | × | × | |
| BHO3A. BHO4 BHO4 BHO5A BHO | B#02 | | | | 1135 | 11 | × × | < × | |
| RHOSA RH | BHOSA | | | | Dhli | 11 | * > | 4 > | |
| RH05A RH | BHOH | | | | 1240 | | X | × | |
| RHOSA RH | 8 HO5 | | | | 1305 | 21 | × : | 7 | |
| RHOSE RH | BHOSA | | | | 1310 | N, | × | ~ | |
| Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba TCLP / SPLP 6010: 8RCRA Sb A | 8 HO6 | | | | 1326 | 12 | × | 4 | |
| Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba ce: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xencervice. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses inconco. A minimum charge of \$75.00 will be applied to each project and a charge of \$6 for each sample submitted to Xenco, but received by: (Signature) Received by: (Signature) Received by: (Signature) Date/Time | 8HO7 | | 4 | + | 1410 | 11 | ¥ × | × | |
| ce: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xen rivice. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses in anco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but Relinquished by: (Signature) Received by: (Signature) Received by: (Signature) Oate/Time | Total 200.7 / 601 Circle Method(s) | 10 200.8 / 6 s) and Metal(s) | 3020: to be and | 88 | CRA 13PF | P 6010: 8R | Sp as | 11 11 | |
| Received by: (Signature) Clux (Luturo) S - 15 20 8 | otice: Signature of this doc f service. Xenco will be lial f Xenco. A minimum charg | ocument and reling able only for the coge of \$75.00 will be | uishment of set of samples applied to e | samples constitutions and shall not a shall not a shall not a school project and | utes a valid purc ssume any resp a charge of \$5 fo | hase order from onsibility for an or each sample s | client compar losses or exp ubmitted to X | ny to Xen penses ir enco, bu | 1 2 2 5 1 |
| | Relinquished by: (| (Signature) | | Received b | y: (Signature | | _ | a ime | |
| | | | | | - | | | | |

Released to Imaging: 7/13/2021 11:08:53 AM

Revised Date 051418 Rev. 2018.1

Phone:

(432) 701-2610 Midland, TX 79705

Address: City, State ZIP:

> 3300 North A St. Bldg 1, Unit 222 LT Environmental, Inc., Permian office

City, State ZIP:

Carlsbad, NM 3104 E Greene St. XTO Energy Kyle Littrell

RRP bvel IV

State of Project: NM

Program: UST/PST □PRP □Brownfields □RC

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Page_

of

Work Order Comments

Address:

Company Name: Bill to: (if different)

Company Name:

Chain of Custody

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

Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: 670249

| Prione: | (432) 701-2610 | - | Email: dmoir@lte | Email: dmoir@ltenv.com rmcafee@ltenv.com | Deliverables: EDD | Other: |
|--|---|--|--|--|-------------------------------|--|
| Project Name: | Row 4 Wolverine | ic SWD Riser | Turn Around | ANALYSIS REQUEST | UEST | Work Order Notes |
| Project Number: | 012920 | 16 | R | | | The state of the s |
| P.O. Number: | | | Rush: | | | |
| Sampler's Name: | Robert McAfee | | Due Date: | | | |
| SAMPLE RECEIPT | IPT Temp Blank: | Yes No | Wet Ice: Yes No | | | |
| Temperature (°C): | De A # 1 | Therm | Thermometer ID | ners | | |
| Received Intact: | Yes No | | | | | |
| Cooler Custody Seals: | s: Yes No N/A | Correction Factor: | Factor: | 15) 021) | T | |
| Sample Custody Seals: | als: Yes No N/A | Total Containers: | tainers: | A 80 | Т | TAT starts the day recevied by the |
| Sample Identification | itification Matrix | Date T | Time Depth | umbe PH (EP TEX (E | | Sample Comments |
| 8048 | 2 | 0 | 0 | × 1 | | |
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| | | | | | | |
| Total 200.7 / 6010 Circle Method(s) a | otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed | 88 | RCRA 13PPM Texas 11 A | I Sb As Ba Be B Cd Ca Cr Co Cu Fe Sb As Ba Be Cd Cr Co Cu Pb Mn M | Mo Ni K Se Ag SiO2 | Na Sr Ti Sn U V Zn 1631/2451/7470/7471: Hn |
| Struce: Signature of this de service. Xenco will be le Xenco. A minimum char | ocument and relinquishment of able only for the cost of sample ge of \$75.00 will be applied to e | samples constitutes a v s and shall not assume ach project and a charg | alid purchase order from any responsibility for any e of \$5 for each sample s | office: 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 Xenco. A minimum charge 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. | | |
| Relinquished by: (Signature) | (Signature) | Received by: (Signature) | gnature) | Date/Time Relinquished by: (Signature) | ure) Received by: (Signature) | Date/Time |
| The me | 100 | la Chiptas | d | 8-18-30 00:41/2 | | |
| , | | - | | 4 | | |
| | | | | O | | Province Data 054449 Day 2049 4 |

Received by OCD 16/3/4/2021 7-35-13

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 08.18.2020 09.14.00 AM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 670249

Analyst:

Temperature Measuring device used: T_NM_007

| | Sample Receipt Checklist | | Comments |
|--|--------------------------|-----|-------------------------------------|
| #1 *Temperature of cooler(s)? | | 1.4 | |
| #2 *Shipping container in good condition? | | Yes | |
| #3 *Samples received on ice? | | Yes | |
| #4 *Custody Seals intact on shipping conta | iner/ 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 relinquis | hed/ received? | Yes | |
| #10 Chain of Custody agrees with sample I | abels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers |
| #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 headsp | pace? | N/A | |

| * Must be completed for after-hours deliver | v of samp | oles prior to | placing in the | he refrigerator |
|---|-----------------|--|----------------|-----------------|
| made be completed for ditor medic deliver | <i>,</i> 0. 0ap | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | p.aog t. | |

| • | | |
|-------------------------|--------------|------------------|
| Checklist completed by: | | Date: 08.18.2020 |
| Checklist reviewed by: | Cloe Clifton | |
| Checkingt reviewed by. | Jes ion | Date: 08.18.2020 |

Jessica Kramer

PH Device/Lot#:

eurofins Environment Testing

Certificate of Analysis Summary 673861

LT Environmental, Inc., Arvada, CO

Project Name: Row 4 Wolverine SWD Riser

Project Id:

Project Location:

012920091

Contact: Dan Moir

Date Received in Lab: Tue 09.29.2020 16:45

Report Date: 09.30.2020 16:13

Project Manager: Jessica Kramer

| | Lab Id: | 673861-0 | 001 | 673861-0 | 02 | 673861-0 | 003 | 673861- | 004 | 673861-0 | 005 | 673861-0 | 006 |
|------------------------------------|------------|------------|---------|------------|---------|------------|---------|------------|---------|------------|---------|------------|---------|
| A or allowing Decreased and | Field Id: | PH01 | | PH01 A | Λ | PH02 | | PH02 A | 1 | PH03 | | PH03 A | |
| Analysis Requested | Depth: | 1- ft | | 4- ft | | 6- ft | | 12- ft | | 1- ft | | 3- ft | |
| | Matrix: | SOIL | | SOIL | | SOIL | , | SOIL | _ | SOIL | , | SOIL | , |
| | Sampled: | 09.28.2020 | 09:50 | 09.28.2020 | 10:10 | 09.28.2020 | 10:55 | 09.28.2020 | 12:45 | 09.28.2020 | 13:05 | 09.28.2020 | 13:14 |
| BTEX by EPA 8021B | Extracted: | 09.29.2020 | 17:53 | 09.29.2020 | 17:53 | 09.29.2020 | 17:53 | 09.29.2020 | 17:53 | 09.29.2020 | 17:53 | 09.29.2020 | 17:53 |
| | Analyzed: | 09.29.2020 | 23:15 | 09.29.2020 | 23:37 | 09.29.2020 | 23:59 | 09.30.2020 | 00:22 | 09.30.2020 | 00:44 | 09.30.2020 | 01:07 |
| | Units/RL: | mg/kg | RL |
| Benzene | | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00202 | 0.00202 |
| Toluene | | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00202 | 0.00202 |
| Ethylbenzene | | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00202 | 0.00202 |
| m,p-Xylenes | | < 0.00399 | 0.00399 | < 0.00401 | 0.00401 | < 0.00402 | 0.00402 | < 0.00402 | 0.00402 | < 0.00402 | 0.00402 | < 0.00403 | 0.00403 |
| o-Xylene | | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00202 | 0.00202 |
| Total Xylenes | | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00202 | 0.00202 |
| Total BTEX | | < 0.00200 | 0.00200 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00201 | 0.00201 | < 0.00202 | 0.00202 |
| Chloride by EPA 300 | Extracted: | 09.29.2020 | 17:26 | 09.29.2020 | 17:26 | 09.29.2020 | 17:26 | 09.29.2020 | 17:26 | 09.29.2020 | 17:26 | 09.29.2020 | 17:26 |
| | Analyzed: | 09.30.2020 | 00:09 | 09.30.2020 | 00:14 | 09.30.2020 | 00:20 | 09.30.2020 | 00:25 | 09.30.2020 | 00:31 | 09.30.2020 | 00:36 |
| | Units/RL: | mg/kg | RL |
| Chloride | | 3210 | 49.5 | 34.2 | 9.88 | 7400 | 49.9 | 160 | 10.0 | 3020 | 50.1 | <10.0 | 10.0 |
| TPH by SW8015 Mod | Extracted: | 09.29.2020 | 17:30 | 09.29.2020 | 17:30 | 09.29.2020 | 17:30 | 09.29.2020 | 18:00 | 09.29.2020 | 18:00 | 09.29.2020 | 18:00 |
| | Analyzed: | 09.30.2020 | 04:44 | 09.30.2020 | 05:04 | 09.30.2020 | 05:25 | 09.30.2020 | 08:08 | 09.30.2020 | 07:07 | 09.30.2020 | 08:29 |
| | Units/RL: | mg/kg | RL |
| Gasoline Range Hydrocarbons (GRO) | | < 50.0 | 50.0 | < 50.1 | 50.1 | < 50.1 | 50.1 | <50.1 | 50.1 | < 50.0 | 50.0 | < 50.1 | 50.1 |
| Diesel Range Organics (DRO) | | < 50.0 | 50.0 | < 50.1 | 50.1 | < 50.1 | 50.1 | <50.1 | 50.1 | < 50.0 | 50.0 | < 50.1 | 50.1 |
| Motor Oil Range Hydrocarbons (MRO) | | < 50.0 | 50.0 | < 50.1 | 50.1 | < 50.1 | 50.1 | <50.1 | 50.1 | < 50.0 | 50.0 | < 50.1 | 50.1 |
| Total GRO-DRO | | < 50.0 | 50.0 | <50.1 | 50.1 | < 50.1 | 50.1 | <50.1 | 50.1 | <50.0 | 50.0 | < 50.1 | 50.1 |
| Total TPH | | < 50.0 | 50.0 | <50.1 | 50.1 | < 50.1 | 50.1 | <50.1 | 50.1 | <50.0 | 50.0 | < 50.1 | 50.1 |

BRL - Below Reporting Limit

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

Jessica Vramer

eurofins Environment Testing

Certificate of Analysis Summary 673861

LT Environmental, Inc., Arvada, CO

Project Name: Row 4 Wolverine SWD Riser

Project Id:

Project Location:

Contact:

012920091 Dan Moir **Date Received in Lab:** Tue 09.29.2020 16:45

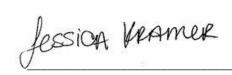
Report Date: 09.30.2020 16:13

Project Manager: Jessica Kramer

| Analysis Requested | Lab Id: | 673861-0 | 007 | 673861-0 | 08 | 673861-009 | | 673861-010 | | 673861-011 | | 673861-012 | |
|------------------------------------|---------------------|------------------|---------|-----------------------|---------|------------------|---------|------------------|---------|------------------|---------|------------------|---------|
| | Field Id: | PH04 | 1 | PH04 A | A | PH05 | | PH05 A | | PH06 | | PH06 A | |
| Anaiysis Requesieu | Depth: | 2- ft | | 6- ft | | 2- ft | | 4- ft | | 1- ft | | 4- ft | |
| | Matrix: | SOIL | SOIL | | | SOIL | | SOIL | | SOIL | | SOIL | |
| | Sampled: | 09.28.2020 13:40 | | 09.28.2020 | 14:02 | 09.28.2020 14:20 | | 09.28.2020 14:28 | | 09.28.2020 14:46 | | 09.28.2020 14:55 | |
| BTEX by EPA 8021B | Extracted: | 09.29.2020 17:53 | | 09.29.2020 17:53 | | 09.29.2020 17:53 | | 09.29.2020 17:53 | | 09.29.2020 17:53 | | | |
| | Analyzed: | 09.30.2020 01:29 | | 09.30.2020 01:51 09.3 | | 09.30.2020 02:14 | | 09.30.2020 02:36 | | 09.30.2020 03:56 | | 09.30.2020 04:19 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Benzene | | < 0.00198 | 0.00198 | < 0.00202 | 0.00202 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | < 0.00202 | 0.00202 |
| Toluene | | < 0.00198 | 0.00198 | < 0.00202 | 0.00202 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | < 0.00202 | 0.00202 |
| Ethylbenzene | | < 0.00198 | 0.00198 | < 0.00202 | 0.00202 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | < 0.00202 | 0.00202 |
| m,p-Xylenes | | < 0.00397 | 0.00397 | < 0.00403 | 0.00403 | < 0.00399 | 0.00399 | < 0.00402 | 0.00402 | < 0.00400 | 0.00400 | < 0.00404 | 0.00404 |
| o-Xylene | | < 0.00198 | 0.00198 | < 0.00202 | 0.00202 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | < 0.00202 | 0.00202 |
| Total Xylenes | | < 0.00198 | 0.00198 | < 0.00202 | 0.00202 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | < 0.00202 | 0.00202 |
| Total BTEX | | < 0.00198 | 0.00198 | < 0.00202 | 0.00202 | < 0.00200 | 0.00200 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | < 0.00202 | 0.00202 |
| Chloride by EPA 300 | Extracted: | 09.29.2020 | 17:26 | 09.29.2020 17:26 | | 09.29.2020 | 17:26 | 09.29.2020 17:26 | | 09.29.2020 17:26 | | 09.29.2020 17:26 | |
| | Analyzed: | 09.30.2020 | 00:52 | 09.30.2020 00:58 | | 09.30.2020 01:14 | | 09.30.2020 01:20 | | 09.30.2020 01:25 | | 09.30.2020 01:31 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 5890 | 49.6 | 300 | 49.9 | 4080 | 49.8 | 45.2 | 9.98 | 3610 | 49.6 | <9.94 | 9.94 |
| TPH by SW8015 Mod | Extracted: | 09.29.2020 | 18:00 | 09.29.2020 18:00 | | 09.29.2020 18:00 | | 09.29.2020 18:00 | | 09.29.2020 18:00 | | 09.29.2020 18:00 | |
| | Analyzed: | 09.30.2020 | 08:48 | 09.30.2020 09:09 | | 09.30.2020 09:29 | | 09.30.2020 09:49 | | 09.30.2020 10:10 | | 09.30.2020 10:30 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Gasoline Range Hydrocarbons (GRO) | | < 50.1 | 50.1 | <50.0 | 50.0 | <49.9 | 49.9 | < 50.1 | 50.1 | <50.2 | 50.2 | <50.2 | 50.2 |
| Diesel Range Organics (DRO) | | < 50.1 | 50.1 | < 50.0 | 50.0 | <49.9 | 49.9 | <50.1 | 50.1 | < 50.2 | 50.2 | <50.2 | 50.2 |
| Motor Oil Range Hydrocarbons (MRO) | | <50.1 50.1 | | < 50.0 | 50.0 | <49.9 | 49.9 | < 50.1 | 50.1 | < 50.2 | 50.2 | < 50.2 | 50.2 |
| Total GRO-DRO | al GRO-DRO <50.1 50 | | 50.1 | < 50.0 | 50.0 | <49.9 | 49.9 | < 50.1 | 50.1 | < 50.2 | 50.2 | < 50.2 | 50.2 |
| Total TPH | | < 50.1 | 50.1 | < 50.0 | 50.0 | <49.9 | 49.9 | < 50.1 | 50.1 | < 50.2 | 50.2 | < 50.2 | 50.2 |

BRL - Below Reporting Limit

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



eurofins Environment Testing

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Certificate of Analysis Summary 673861

LT Environmental, Inc., Arvada, CO

Project Id: Contact:

Project Location:

012920091

Dan Moir

Project Name: Row 4 Wolverine SWD Riser

Date Received in Lab: Tue 09.29.2020 16:45

Report Date: 09.30.2020 16:13

Project Manager: Jessica Kramer

| | | | | | | | |
|------------------------------------|------------|------------------|---------|------------------|---------|------|------|
| | Lab Id: | 673861-0 | 13 | 673861-01 | 4 | | |
| Analysis Requested | Field Id: | PH07 | | PH07 A | | | |
| Analysis Requesieu | Depth: | 1- ft | | 4- ft | | | |
| | Matrix: | SOIL | | SOIL | | | |
| | Sampled: | 09.28.2020 | 15:15 | 09.28.2020 1 | 5:24 | | |
| BTEX by EPA 8021B | Extracted: | 09.29.2020 | 17:53 | 09.29.2020 1 | 7:53 | | |
| | Analyzed: | 09.30.2020 | 04:41 | 09.30.2020 0 | 5:03 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | | |
| Benzene | | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | | |
| Toluene | | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | | |
| Ethylbenzene | | < 0.00199 | 0.00199 | | 0.00200 | | |
| m,p-Xylenes | | | 0.00398 | | 0.00400 | | |
| o-Xylene | | | 0.00199 | | 0.00200 | | |
| Total Xylenes | | | 0.00199 | | 0.00200 | | |
| Total BTEX | | < 0.00199 | 0.00199 | < 0.00200 | 0.00200 | | |
| Chloride by EPA 300 | Extracted: | 09.29.2020 17:26 | | 09.29.2020 17:26 | | | |
| | Analyzed: | 09.30.2020 | 01:36 | 09.30.2020 01:42 | | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | | |
| Chloride | | 4600 | 50.1 | 47.7 | 10.0 | | |
| TPH by SW8015 Mod | Extracted: | 09.29.2020 18:00 | | 09.29.2020 18:00 | | | |
| | Analyzed: | 09.30.2020 | 10:50 | 09.30.2020 1 | 1:30 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | | |
| Gasoline Range Hydrocarbons (GRO) | | <49.9 | 49.9 | < 50.0 | 50.0 | | |
| Diesel Range Organics (DRO) | | <49.9 | 49.9 | < 50.0 | 50.0 | | |
| Motor Oil Range Hydrocarbons (MRO) | | <49.9 | 49.9 | < 50.0 | 50.0 | | |
| Total GRO-DRO | | <49.9 | 49.9 | <50.0 | 50.0 | | |
| Total TPH | | <49.9 | 49.9 | <50.0 | 50.0 | | |

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 673861

for

LT Environmental, Inc.

Project Manager: Dan Moir

Row 4 Wolverine SWD Riser 012920091 09.30.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



09.30.2020

Project Manager: **Dan Moir LT Environmental, Inc.**4600 W. 60th Avenue
Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 673861

Row 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 673861. 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 Eurofins Xenco, LLC. 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. 673861 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 673861

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| PH01 | S | 09.28.2020 09:50 | 1 ft | 673861-001 |
| PH01 A | S | 09.28.2020 10:10 | 4 ft | 673861-002 |
| PH02 | S | 09.28.2020 10:55 | 6 ft | 673861-003 |
| PH02 A | S | 09.28.2020 12:45 | 12 ft | 673861-004 |
| PH03 | S | 09.28.2020 13:05 | 1 ft | 673861-005 |
| PH03 A | S | 09.28.2020 13:14 | 3 ft | 673861-006 |
| PH04 | S | 09.28.2020 13:40 | 2 ft | 673861-007 |
| PH04 A | S | 09.28.2020 14:02 | 6 ft | 673861-008 |
| PH05 | S | 09.28.2020 14:20 | 2 ft | 673861-009 |
| PH05 A | S | 09.28.2020 14:28 | 4 ft | 673861-010 |
| PH06 | S | 09.28.2020 14:46 | 1 ft | 673861-011 |
| PH06 A | S | 09.28.2020 14:55 | 4 ft | 673861-012 |
| PH07 | S | 09.28.2020 15:15 | 1 ft | 673861-013 |
| PH07 A | S | 09.28.2020 15:24 | 4 ft | 673861-014 |

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CASE NARRATIVE

eurofins **Environment Testing** Xenco

Client Name: LT Environmental, Inc. Project Name: Row 4 Wolverine SWD Riser

Project ID: Report Date: 09.30.2020 012920091 Work Order Number(s): 673861 Date Received: 09.29.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Xenco

Certificate of Analytical Results 673861

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH01 Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-001 Date Collected: 09.28.2020 09:50 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:26 Basis: Wet Weight

Seq Number: 3138471

Tech:

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|----------------------|------|-----|
| Chloride | 16887-00-6 | 3210 | 49.5 | mg/kg | 09.30.2020 00:09 | | 5 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 09.29.2020 17:30 Basis: Wet Weight

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|-----------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <50.0 | 50.0 | | mg/kg | 09.30.2020 04:44 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.0 | 50.0 | | mg/kg | 09.30.2020 04:44 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.0 | 50.0 | | mg/kg | 09.30.2020 04:44 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.0 | 50.0 | | mg/kg | 09.30.2020 04:44 | U | 1 |
| Total TPH | PHC635 | < 50.0 | 50.0 | | mg/kg | 09.30.2020 04:44 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1-Chlorooctane | | 111-85-3 | 108 | % | 70-135 | 09.30.2020 04:44 | | |
| o-Terphenyl | | 84-15-1 | 102 | % | 70-135 | 09.30.2020 04:44 | | |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: **PH01** Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-001 Date Collected: 09.28.2020 09:50 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

MAB Analyst: Date Prep: 09.29.2020 17:53 Basis: Wet Weight

Seq Number: 3138453

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:15 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:15 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:15 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00399 | 0.00399 | | mg/kg | 09.29.2020 23:15 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:15 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:15 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:15 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 114 | % | 70-130 | 09.29.2020 23:15 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 103 | % | 70-130 | 09.29.2020 23:15 | | |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH01 A Matrix: Soil

Date Received:09.29.2020 16:45

Lab Sample Id: 673861-002 Date Collected: 09.28.2020 10:10

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.29.2020 17:26

Basis:

Wet Weight

Seq Number: 3138471

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 34.2 | 9.88 | mg/kg | 09.30.2020 00:14 | | 1 |

Analytical Method: TPH by SW8015 Mod

DTH

Prep Method: SW8015P

% Moisture:

Tech: DTH

Analyst:

Date Prep: 09.29.2020 17:30

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <50.1 | 50.1 | | mg/kg | 09.30.2020 05:04 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.1 | 50.1 | | mg/kg | 09.30.2020 05:04 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 05:04 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 05:04 | U | 1 |
| Total TPH | PHC635 | <50.1 | 50.1 | | mg/kg | 09.30.2020 05:04 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|------------------|
| 1-Chlorooctane | 111-85-3 | 116 | % | 70-135 | 09.30.2020 05:04 |
| o-Terphenyl | 84-15-1 | 105 | % | 70-135 | 09.30.2020 05:04 |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH01 A Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-002 Date Collected: 09.28.2020 10:10 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:53 Basis: Wet Weight

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:37 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:37 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:37 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00401 | 0.00401 | | mg/kg | 09.29.2020 23:37 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:37 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:37 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 09.29.2020 23:37 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene | | 540-36-3 | 98 | % | 70-130 | 09.29.2020 23:37 | | |
| 4-Bromofluorobenzene | | 460-00-4 | 108 | % | 70-130 | 09.29.2020 23:37 | | |

Sample Id:

Tech:

Certificate of Analytical Results 673861

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-003 Date Collected: 09.28.2020 10:55 Sample Depth: 6 ft

Prep Method: E300P

% Moisture:

MAB Analyst: Date Prep: 09.29.2020 17:26 Basis: Wet Weight

Seq Number: 3138471

PH02

MAB

Analytical Method: Chloride by EPA 300

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 7400 | 49.9 | mg/kg | 09.30.2020 00:20 | | 5 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

DTH % Moisture: Tech:

Analyst: DTH Basis: Wet Weight Date Prep: 09.29.2020 17:30

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|-----------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 05:25 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.1 | 50.1 | | mg/kg | 09.30.2020 05:25 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 05:25 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 05:25 | U | 1 |
| Total TPH | PHC635 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 05:25 | U | 1 |
| Surrogate | C | as Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | |
|----------------|------------|------------|-------|--------|----------------------|--|
| 1-Chlorooctane | 111-85-3 | 121 | % | 70-135 | 09.30.2020 05:25 | |
| o-Terphenyl | 84-15-1 | 129 | % | 70-135 | 09.30.2020 05:25 | |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH02 Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-003 Date Collected: 09.28.2020 10:55 Sample Depth: 6 ft

Prep Method: SW5035A

Tech: MAB % Moisture:

540-36-3

Date Prep: 09.29.2020 17:53 Basis: Wet Weight

Seq Number: 3138453

1,4-Difluorobenzene

Analyst:

Analytical Method: BTEX by EPA 8021B

MAB

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00201 | 0.00201 | | mg/kg | 09.29.2020 23:59 | U | 1 |
| Toluene | 108-88-3 | < 0.00201 | 0.00201 | | mg/kg | 09.29.2020 23:59 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00201 | 0.00201 | | mg/kg | 09.29.2020 23:59 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00402 | 0.00402 | | mg/kg | 09.29.2020 23:59 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00201 | 0.00201 | | mg/kg | 09.29.2020 23:59 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00201 | 0.00201 | | mg/kg | 09.29.2020 23:59 | U | 1 |
| Total BTEX | | < 0.00201 | 0.00201 | | mg/kg | 09.29.2020 23:59 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 120 | % | 70-130 | 09.29.2020 23:59 | | |

106

%

70-130

09.29.2020 23:59



Sample Id:

Tech:

Analyst:

Certificate of Analytical Results 673861

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Soil

Date Received:09.29.2020 16:45

Lab Sample Id: 673861-004 Date Collected: 09.28.2020 12:45 Sample Depth: 12 ft

Analytical Method: Chloride by EPA 300

PH02 A

MAB

Prep Method: E300P

MAB

Matrix:

% Moisture:

Seq Number: 3138471

Date Prep: 09.29.2020 17:26 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|----------------------|------|-----|
| Chloride | 16887-00-6 | 160 | 10.0 | mg/kg | 09.30.2020 00:25 | | 1 |

Analytical Method: TPH by SW8015 Mod

DTH

Prep Method: SW8015P

% Moisture:

DTH Tech:

Analyst:

Date Prep: 09.29.2020 18:00

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:08 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:08 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:08 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:08 | U | 1 |
| Total TPH | PHC635 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:08 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|----------------------|
| 1-Chlorooctane | 111-85-3 | 104 | % | 70-135 | 09.30.2020 08:08 |
| o-Terphenyl | 84-15-1 | 103 | % | 70-135 | 09.30.2020 08:08 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH02 A Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-004 Date Collected: 09.28.2020 12:45 Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:53 Basis: Wet Weight

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:22 | U | 1 |
| Toluene | 108-88-3 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:22 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:22 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00402 | 0.00402 | | mg/kg | 09.30.2020 00:22 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:22 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:22 | U | 1 |
| Total BTEX | | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:22 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene | | 540-36-3 | 107 | % | 70-130 | 09.30.2020 00:22 | | |
| 4-Bromofluorobenzene | | 460-00-4 | 121 | % | 70-130 | 09.30.2020 00:22 | | |

PH03

MAB

Sample Id:

Analyst:

Certificate of Analytical Results 673861

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Soil

09.29.2020 17:26

Lab Sample Id: 673861-005 Date Collected: 09.28.2020 13:05 Sample Depth: 1 ft

Matrix:

Date Prep:

Analytical Method: Chloride by EPA 300 Prep Method: E

Prep Method: E300P

Prep Method: SW8015P

% Moisture:

Basis:

Date Received:09.29.2020 16:45

Wet Weight

Tech: MAB % Moisture:

Seq Number: 3138471

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 3020 | 50.1 | mg/kg | 09.30.2020 00:31 | | 5 |

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH Date Prep: 09.29.2020 18:00 Basis: Wet Weight

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|-----------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <50.0 | 50.0 | | mg/kg | 09.30.2020 07:07 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.0 | 50.0 | | mg/kg | 09.30.2020 07:07 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.0 | 50.0 | | mg/kg | 09.30.2020 07:07 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.0 | 50.0 | | mg/kg | 09.30.2020 07:07 | U | 1 |
| Total TPH | PHC635 | <50.0 | 50.0 | | mg/kg | 09.30.2020 07:07 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1-Chlorooctane | | 111-85-3 | 104 | % | 70-135 | 09.30.2020 07:07 | | |
| o-Terphenyl | | 84-15-1 | 99 | % | 70-135 | 09.30.2020 07:07 | | |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH03 Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-005 Date Collected: 09.28.2020 13:05 Sample Depth: 1 ft

Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:53 Basis: Wet Weight

Seq Number: 3138453

Analytical Method: BTEX by EPA 8021B

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:44 | U | 1 |
| Toluene | 108-88-3 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:44 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:44 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00402 | 0.00402 | | mg/kg | 09.30.2020 00:44 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:44 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:44 | U | 1 |
| Total BTEX | | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 00:44 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 115 | % | 70-130 | 09.30.2020 00:44 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 107 | % | 70-130 | 09.30.2020 00:44 | | |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH03 A Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-006 Date Collected: 09.28.2020 13:14 Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

% Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:26 Basis: Wet Weight

Seq Number: 3138471

MAB

Tech:

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|----------------------|------|-----|
| Chloride | 16887-00-6 | <10.0 | 10.0 | mg/kg | 09.30.2020 00:36 | U | 1 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 09.29.2020 18:00 Basis: Wet Weight

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|-----------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <50.1 | 50.1 | | mg/kg | 09.30.2020 08:29 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:29 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:29 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:29 | U | 1 |
| Total TPH | PHC635 | <50.1 | 50.1 | | mg/kg | 09.30.2020 08:29 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1-Chlorooctane | | 111-85-3 | 118 | % | 70-135 | 09.30.2020 08:29 | | |
| o-Terphenyl | | 84-15-1 | 118 | % | 70-135 | 09.30.2020 08:29 | | |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH03 A Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-006 Date Collected: 09.28.2020 13:14 Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

460-00-4

Analyst: MAB Date Prep: 09.29.2020 17:53 Basis: Wet Weight

Seq Number: 3138453

4-Bromofluorobenzene

| | Cas Number | Result | \mathbf{RL} | | Units | Analysis Date | Flag | Dil |
|---------------------|-------------|------------|---------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:07 | U | 1 |
| Toluene | 108-88-3 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:07 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:07 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00403 | 0.00403 | | mg/kg | 09.30.2020 01:07 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:07 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:07 | U | 1 |
| Total BTEX | | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:07 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene | 4 | 540-36-3 | 94 | % | 70-130 | 09.30.2020 01:07 | | |

108

%

70-130

09.30.2020 01:07



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH04 Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-007 Date Collected: 09.28.2020 13:40 Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:26 Basis: Wet Weight

Seq Number: 3138471

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|----------------------|------|-----|
| Chloride | 16887-00-6 | 5890 | 49.6 | mg/kg | 09.30.2020 00:52 | | 5 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 09.29.2020 18:00 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|-----------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <50.1 | 50.1 | | mg/kg | 09.30.2020 08:48 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:48 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:48 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:48 | U | 1 |
| Total TPH | PHC635 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 08:48 | U | 1 |
| Surrogate | C | as Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|------------------|
| 1-Chlorooctane | 111-85-3 | 107 | % | 70-135 | 09.30.2020 08:48 |
| o-Terphenyl | 84-15-1 | 100 | % | 70-135 | 09.30.2020 08:48 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: **PH04** Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-007 Date Collected: 09.28.2020 13:40 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

MAB Analyst: Date Prep: 09.29.2020 17:53 Basis: Wet Weight

Seq Number: 3138453

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00198 | 0.00198 | | mg/kg | 09.30.2020 01:29 | U | 1 |
| Toluene | 108-88-3 | < 0.00198 | 0.00198 | | mg/kg | 09.30.2020 01:29 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00198 | 0.00198 | | mg/kg | 09.30.2020 01:29 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00397 | 0.00397 | | mg/kg | 09.30.2020 01:29 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00198 | 0.00198 | | mg/kg | 09.30.2020 01:29 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00198 | 0.00198 | | mg/kg | 09.30.2020 01:29 | U | 1 |
| Total BTEX | | < 0.00198 | 0.00198 | | mg/kg | 09.30.2020 01:29 | U | 1 |
| Surrogate | (| Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene | 5 | 540-36-3 | 104 | % | 70-130 | 09.30.2020 01:29 | | |
| 4-Bromofluorobenzene | 4 | 60-00-4 | 118 | % | 70-130 | 09.30.2020 01:29 | | |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH04 A Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-008 Date Collected: 09.28.2020 14:02 Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:26 Basis: Wet Weight

Seq Number: 3138471

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|----------------------|------|-----|
| Chloride | 16887-00-6 | 300 | 49.9 | mg/kg | 09.30.2020 00:58 | | 5 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 09.29.2020 18:00 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|-----------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <50.0 | 50.0 | | mg/kg | 09.30.2020 09:09 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.0 | 50.0 | | mg/kg | 09.30.2020 09:09 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.0 | 50.0 | | mg/kg | 09.30.2020 09:09 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.0 | 50.0 | | mg/kg | 09.30.2020 09:09 | U | 1 |
| Total TPH | PHC635 | < 50.0 | 50.0 | | mg/kg | 09.30.2020 09:09 | U | 1 |
| Surrogate | C | as Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | |
|----------------|------------|------------|-------|--------|------------------|--|
| 1-Chlorooctane | 111-85-3 | 105 | % | 70-135 | 09.30.2020 09:09 | |
| o-Terphenyl | 84-15-1 | 102 | % | 70-135 | 09.30.2020 09:09 | |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH04 A Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-008 Date Collected: 09.28.2020 14:02 Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:53 Basis: Wet Weight

| Parameter | Cas Number | Result | \mathbf{RL} | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|---------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:51 | U | 1 |
| Toluene | 108-88-3 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:51 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:51 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00403 | 0.00403 | | mg/kg | 09.30.2020 01:51 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:51 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:51 | U | 1 |
| Total BTEX | | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 01:51 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 118 | % | 70-130 | 09.30.2020 01:51 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 102 | % | 70-130 | 09.30.2020 01:51 | | |

Sample Id:

Certificate of Analytical Results 673861

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Soil

Lab Sample Id: 673861-009 Date Collected: 09.28.2020 14:20 Sample Depth: 2 ft

Prep Method: E300P

Date Received:09.29.2020 16:45

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:26 Basis: Wet Weight

Matrix:

Seq Number: 3138471

PH05

Analytical Method: Chloride by EPA 300

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 4080 | 49.8 | mg/kg | 09.30.2020 01:14 | | 5 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 09.29.2020 18:00 Basis: Wet Weight

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|-----------|------------|------------|-------|--------|----------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.9 | 49.9 | | mg/kg | 09.30.2020 09:29 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.9 | 49.9 | | mg/kg | 09.30.2020 09:29 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.9 | 49.9 | | mg/kg | 09.30.2020 09:29 | U | 1 |
| Total GRO-DRO | PHC628 | <49.9 | 49.9 | | mg/kg | 09.30.2020 09:29 | U | 1 |
| Total TPH | PHC635 | <49.9 | 49.9 | | mg/kg | 09.30.2020 09:29 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1-Chlorooctane | | 111-85-3 | 109 | % | 70-135 | 09.30.2020 09:29 | | |
| o-Terphenyl | | 84-15-1 | 100 | % | 70-135 | 09.30.2020 09:29 | | |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH05 Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-009 Date Collected: 09.28.2020 14:20 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:53 Basis: Wet Weight

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 02:14 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 02:14 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 02:14 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00399 | 0.00399 | | mg/kg | 09.30.2020 02:14 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 02:14 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 02:14 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 02:14 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene | | 540-36-3 | 100 | % | 70-130 | 09.30.2020 02:14 | | |
| 4-Bromofluorobenzene | | 460-00-4 | 113 | % | 70-130 | 09.30.2020 02:14 | | |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH05 A Matrix: Soil

Date Received:09.29.2020 16:45

Lab Sample Id: 673861-010 Date Collected: 09.28.2020 14:28 Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB % Moisture:

MAB Analyst:

Date Prep: 09.29.2020 17:26 Basis:

Wet Weight

Seq Number: 3138471

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 45.2 | 9.98 | mg/kg | 09.30.2020 01:20 | | 1 |

Analytical Method: TPH by SW8015 Mod

DTH

Prep Method: SW8015P

% Moisture:

DTH Tech:

09.29.2020 18:00

Basis: Wet Weight

Analyst: Seq Number: 3138480

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 09:49 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.1 | 50.1 | | mg/kg | 09.30.2020 09:49 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 09:49 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.1 | 50.1 | | mg/kg | 09.30.2020 09:49 | U | 1 |
| Total TPH | PHC635 | <50.1 | 50.1 | | mg/kg | 09.30.2020 09:49 | U | 1 |
| Surrogate | (| Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

Date Prep:

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | |
|----------------|------------|------------|-------|--------|----------------------|--|
| 1-Chlorooctane | 111-85-3 | 104 | % | 70-135 | 09.30.2020 09:49 | |
| o-Terphenyl | 84-15-1 | 100 | % | 70-135 | 09.30.2020 09:49 | |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH05 A Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-010 Date Collected: 09.28.2020 14:28 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:53 Basis: Wet Weight

Seq Number: 3138453

Tech:

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 02:36 | U | 1 |
| Toluene | 108-88-3 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 02:36 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 02:36 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00402 | 0.00402 | | mg/kg | 09.30.2020 02:36 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 02:36 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 02:36 | U | 1 |
| Total BTEX | | < 0.00201 | 0.00201 | | mg/kg | 09.30.2020 02:36 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1,4-Difluorobenzene | | 540-36-3 | 104 | % | 70-130 | 09.30.2020 02:36 | | |
| 4-Bromofluorobenzene | | 460-00-4 | 115 | % | 70-130 | 09.30.2020 02:36 | | |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: **PH06** Matrix: Soil

Date Received:09.29.2020 16:45

Lab Sample Id: 673861-011 Date Collected: 09.28.2020 14:46 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB % Moisture:

MAB Analyst:

Date Prep: 09.29.2020 17:26 Basis:

Wet Weight

Seq Number: 3138471

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 3610 | 49.6 | mg/kg | 09.30.2020 01:25 | | 5 |

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

% Moisture:

DTH Tech:

Analyst: DTH Date Prep: 09.29.2020 18:00 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|-----------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.2 | 50.2 | | mg/kg | 09.30.2020 10:10 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.2 | 50.2 | | mg/kg | 09.30.2020 10:10 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.2 | 50.2 | | mg/kg | 09.30.2020 10:10 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.2 | 50.2 | | mg/kg | 09.30.2020 10:10 | U | 1 |
| Total TPH | PHC635 | < 50.2 | 50.2 | | mg/kg | 09.30.2020 10:10 | U | 1 |
| Surrogate | C | as Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|----------------------|
| 1-Chlorooctane | 111-85-3 | 107 | % | 70-135 | 09.30.2020 10:10 |
| o-Terphenyl | 84-15-1 | 105 | % | 70-135 | 09.30.2020 10:10 |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH06 Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-011 Date Collected: 09.28.2020 14:46 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:53 Basis: Wet Weight

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 03:56 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 03:56 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 03:56 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00400 | 0.00400 | | mg/kg | 09.30.2020 03:56 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 03:56 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 03:56 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 03:56 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 118 | % | 70-130 | 09.30.2020 03:56 | | |
| 1.4-Difluorobenzene | | 540-36-3 | 102 | % | 70-130 | 09.30.2020 03:56 | | |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH06 A Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-012

Date Collected: 09.28.2020 14:55

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

MAB

% Moisture:

MAB Analyst:

Date Prep: 09.29.2020 17:26 Basis:

Wet Weight

Seq Number: 3138471

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | < 9.94 | 9.94 | mg/kg | 09.30.2020 01:31 | U | 1 |

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

DTH

% Moisture:

Tech: Analyst: DTH

Date Prep: 09.29.2020 18:00 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <50.2 | 50.2 | | mg/kg | 09.30.2020 10:30 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.2 | 50.2 | | mg/kg | 09.30.2020 10:30 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.2 | 50.2 | | mg/kg | 09.30.2020 10:30 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.2 | 50.2 | | mg/kg | 09.30.2020 10:30 | U | 1 |
| Total TPH | PHC635 | < 50.2 | 50.2 | | mg/kg | 09.30.2020 10:30 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|----------------------|
| 1-Chlorooctane | 111-85-3 | 106 | % | 70-135 | 09.30.2020 10:30 |
| o-Terphenyl | 84-15-1 | 103 | % | 70-135 | 09.30.2020 10:30 |

PH06 A

Analytical Method: BTEX by EPA 8021B

MAB

Sample Id:

Tech:

Certificate of Analytical Results 673861

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-012 Date Collected: 09.28.2020 14:55 Sample Depth: 4 ft

540-36-3

Prep Method: SW5035A

% Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:53 Basis: Wet Weight

Seq Number: 3138453

1,4-Difluorobenzene

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 04:19 | U | 1 |
| Toluene | 108-88-3 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 04:19 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 04:19 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00404 | 0.00404 | | mg/kg | 09.30.2020 04:19 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 04:19 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 04:19 | U | 1 |
| Total BTEX | | < 0.00202 | 0.00202 | | mg/kg | 09.30.2020 04:19 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 115 | % | 70-130 | 09.30.2020 04:19 | | |

105

%

70-130

09.30.2020 04:19

PH07

MAB

MAB

Analytical Method: Chloride by EPA 300

5



Sample Id:

Tech:

Analyst:

Chloride

Analyst:

Certificate of Analytical Results 673861

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Soil

16887-00-6

Date Received:09.29.2020 16:45

Wet Weight

Date Collected: 09.28.2020 15:15

50.1

Sample Depth: 1 ft

Prep Method: E300P

mg/kg

% Moisture:

Basis:

09.29.2020 17:26

Seq Number: 3138471

Lab Sample Id: 673861-013

Result **Parameter** Cas Number RLUnits **Analysis Date** Dil Flag

Matrix:

Date Prep:

4600

Analytical Method: TPH by SW8015 Mod

DTH

Prep Method: SW8015P

09.30.2020 01:36

% Moisture:

DTH Tech:

> Date Prep: 09.29.2020 18:00

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.9 | 49.9 | | mg/kg | 09.30.2020 10:50 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.9 | 49.9 | | mg/kg | 09.30.2020 10:50 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.9 | 49.9 | | mg/kg | 09.30.2020 10:50 | U | 1 |
| Total GRO-DRO | PHC628 | <49.9 | 49.9 | | mg/kg | 09.30.2020 10:50 | U | 1 |
| Total TPH | PHC635 | <49.9 | 49.9 | | mg/kg | 09.30.2020 10:50 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|----------------------|
| 1-Chlorooctane | 111-85-3 | 104 | % | 70-135 | 09.30.2020 10:50 |
| o-Terphenyl | 84-15-1 | 102 | % | 70-135 | 09.30.2020 10:50 |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH07 Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-013 Date Collected: 09.28.2020 15:15 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 09.29.2020 17:53 Basis: Wet Weight

| Parameter | Cas Numbe | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00199 | 0.00199 | | mg/kg | 09.30.2020 04:41 | U | 1 |
| Toluene | 108-88-3 | < 0.00199 | 0.00199 | | mg/kg | 09.30.2020 04:41 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00199 | 0.00199 | | mg/kg | 09.30.2020 04:41 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00398 | 0.00398 | | mg/kg | 09.30.2020 04:41 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00199 | 0.00199 | | mg/kg | 09.30.2020 04:41 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00199 | 0.00199 | | mg/kg | 09.30.2020 04:41 | U | 1 |
| Total BTEX | | < 0.00199 | 0.00199 | | mg/kg | 09.30.2020 04:41 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 113 | % | 70-130 | 09.30.2020 04:41 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 104 | % | 70-130 | 09.30.2020 04:41 | | |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Soil

Date Received:09.29.2020 16:45

Lab Sample Id: 673861-014 Date Collected: 09.28.2020 15:24 Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

% Moisture:

Tech: MAB MAB

Sample Id:

Analyst:

Date Prep: 09.29.2020 17:26

Matrix:

Basis:

Wet Weight

Seq Number: 3138471

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|----------------------|------|-----|
| Chloride | 16887-00-6 | 47.7 | 10.0 | mg/kg | 09.30.2020 01:42 | | 1 |

Analytical Method: TPH by SW8015 Mod

PH07 A

Prep Method: SW8015P

% Moisture:

Tech: Analyst: DTH DTH

Date Prep: 09.29.2020 18:00 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <50.0 | 50.0 | | mg/kg | 09.30.2020 11:30 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.0 | 50.0 | | mg/kg | 09.30.2020 11:30 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.0 | 50.0 | | mg/kg | 09.30.2020 11:30 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.0 | 50.0 | | mg/kg | 09.30.2020 11:30 | U | 1 |
| Total TPH | PHC635 | < 50.0 | 50.0 | | mg/kg | 09.30.2020 11:30 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|----------------------|
| 1-Chlorooctane | 111-85-3 | 102 | % | 70-135 | 09.30.2020 11:30 |
| o-Terphenyl | 84-15-1 | 106 | % | 70-135 | 09.30.2020 11:30 |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: PH07 A Matrix: Soil Date Received:09.29.2020 16:45

Lab Sample Id: 673861-014 Date Collected: 09.28.2020 15:24 Sample Depth: 4 ft

Prep Method: SW5035A

Tech: MAB % Moisture:

MAB Analyst: Date Prep: 09.29.2020 17:53 Basis: Wet Weight

Seq Number: 3138453

Analytical Method: BTEX by EPA 8021B

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 05:03 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 05:03 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 05:03 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00400 | 0.00400 | | mg/kg | 09.30.2020 05:03 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 05:03 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 05:03 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | | mg/kg | 09.30.2020 05:03 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 119 | % | 70-130 | 09.30.2020 05:03 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 108 | % | 70-130 | 09.30.2020 05:03 | | |



Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit. **ND** Not Detected.

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

^{**} Surrogate recovered outside laboratory control limit.

QC Summary 673861

LT Environmental, Inc.

Row 4 Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

Seg Number: 3138471

Matrix: Solid

E300P Prep Method:

Date Prep: 09.29.2020

7712349-1-BLK LCS Sample Id: 7712349-1-BKS LCSD Sample Id: 7712349-1-BSD MB Sample Id:

LCS RPD MB Spike LCS Limits %RPD Units Analysis LCSD LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 250 100 251 90-110 0 20 09.29.2020 23:08 100 mg/kg

Analytical Method: Chloride by EPA 300

Seq Number: 3138471

Parent Sample Id: 673855-001

E300P Prep Method: Matrix: Soil Date Prep: 09.29.2020

673855-001 S MS Sample Id: MSD Sample Id: 673855-001 SD

Parent Spike MS MS MSD MSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result 09.29.2020 23:25 Chloride 209 199 407 99 408 100 90-110 0 20 mg/kg

Analytical Method: Chloride by EPA 300

3138471 Seq Number:

Matrix: Soil

E300P

Prep Method: Date Prep: 09.29.2020

MS Sample Id: 673861-006 S Parent Sample Id: 673861-006

MSD Sample Id: 673861-006 SD

Spike **RPD Parent** MS MS %RPD Units MSD **MSD** Limits Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Chloride 20 09.30.2020 00:41 <10.0 201 213 106 213 106 90-110 0 mg/kg

Analytical Method: TPH by SW8015 Mod

3138454 Seq Number:

Matrix: Solid

Prep Method: Date Prep: SW8015P

Flag

Flag

09.29.2020 MB Sample Id: 7712307-1-BLK LCS Sample Id: 7712307-1-BKS LCSD Sample Id: 7712307-1-BSD

MB Spike LCS LCS LCSD LCSD Limits %RPD **RPD** Units Analysis **Parameter**

Result Limit Date Result Amount %Rec %Rec Result Gasoline Range Hydrocarbons (GRO) 09.29.2020 20:58 35 < 50.0 1000 1080 108 1030 103 70-135 5 mg/kg 09.29.2020 20:58 Diesel Range Organics (DRO) 70-135 35 < 50.0 1000 1130 113 1090 109 4 mg/kg

LCS MBMB LCS LCSD Limits Units Analysis LCSD **Surrogate** %Rec %Rec Flag Date Flag %Rec Flag 09.29.2020 20:58 1-Chlorooctane 92 122 117 70-135 % 09.29.2020 20:58 o-Terphenyl 90 105 104 70-135 %

Analytical Method: TPH by SW8015 Mod

Prep Method:

SW8015P

Seq Number: 3138480 Matrix: Solid Date Prep: 09.29.2020

LCS Sample Id: 7712357-1-BKS LCSD Sample Id: 7712357-1-BSD MB Sample Id: 7712357-1-BLK MB Spike LCS LCS %RPD RPD Units LCSD LCSD Limits Analysis **Parameter** Limit Result Amount Result %Rec Date Result %Rec Gasoline Range Hydrocarbons (GRO) 09.30.2020 06:06 1000 948 95 864 9 35 < 50.0 86 70-135 mg/kg

09.30.2020 06:06 Diesel Range Organics (DRO) 70-135 < 50.0 1000 986 99 890 89 10 35 mg/kg MB MB LCS LCS LCSD Units Analysis LCSD Limits **Surrogate** Flag Date %Rec Flag %Rec %Rec Flag 09.30.2020 06:06 1-Chlorooctane 97 122 112 70-135 % 09.30.2020 06:06 o-Terphenyl 90 91 85 70-135 %

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / B $RPD = 200* \mid (C-E) \mid (C+E) \mid$ [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result

= MS/LCS Result = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

Flag

Flag

Flag

QC Summary 673861

LT Environmental, Inc.

Row 4 Wolverine SWD Riser

Analytical Method: TPH by SW8015 Mod

Seq Number: 3138454 Matrix: Solid

SW8015P Prep Method:

Date Prep: 09.29.2020

MB Sample Id: 7712307-1-BLK

Parameter Result

MB

Units Analysis Date

Motor Oil Range Hydrocarbons (MRO) < 50.0

09.29.2020 21:39 mg/kg

Analytical Method: TPH by SW8015 Mod

Seq Number: 3138480 Matrix: Solid

Prep Method: SW8015P

MB Sample Id: 7712357-1-BLK

Parameter

MB Result Date Prep: 09.29.2020

Units

Analysis Date

Motor Oil Range Hydrocarbons (MRO) < 50.0

09.30.2020 06:47 mg/kg

Analytical Method: TPH by SW8015 Mod

3138454 Seq Number:

Matrix: Soil

SW8015P Prep Method:

Date Prep:

09.29.2020

MS Sample Id: 673797-026 S MSD Sample Id: 673797-026 SD Parent Sample Id: 673797-026

Spike **RPD** MS MS %RPD Units **Parent** MSD **MSD** Limits Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Gasoline Range Hydrocarbons (GRO) <50.3 1010 1080 107 1080 70-135 35 09.29.2020 22:20 108 0 mg/kg Diesel Range Organics (DRO) < 50.3 1010 1160 115 1140 70-135 2 35 09.29.2020 22:20 114 mg/kg

| Surrogate | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date |
|----------------|------------|------------|-------------|-------------|--------|-------|------------------|
| 1-Chlorooctane | 125 | | 125 | | 70-135 | % | 09.29.2020 22:20 |
| o-Terphenyl | 113 | | 112 | | 70-135 | % | 09.29.2020 22:20 |

Analytical Method: TPH by SW8015 Mod

Seq Number: 3138480

673861-005

Matrix: Soil

Prep Method:

SW8015P

Date Prep: 09.29.2020

MS Sample Id: 673861-005 S Parent Sample Id: MSD Sample Id: 673861-005 SD

%RPD RPD **Parent** Spike MS MS **MSD MSD** Limits Units Analysis **Parameter** Result Limit Date Result %Rec Amount Result %Rec Gasoline Range Hydrocarbons (GRO) 35 09.30.2020 07:28 <49.8 996 1040 104 1010 101 70-135 3 mg/kg 09.30.2020 07:28 <49.8 996 1080 108 1050 70-135 3 Diesel Range Organics (DRO) 105 35 mg/kg

MS MS **MSD** Limits Units Analysis MSD **Surrogate** %Rec Flag %Rec Flag Date 09.30.2020 07:28 123 1-Chlorooctane 118 70-135 % 09.30.2020 07:28 o-Terphenyl 107 103 70-135 %

SW5035A

QC Summary 673861

LT Environmental, Inc.

Row 4 Wolverine SWD Riser

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3138453Matrix:SolidDate Prep:09.29.2020MB Sample Id:7712342-1-BLKLCS Sample Id:7712342-1-BKSLCSD Sample Id:7712342-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|----------------------|--------------|-----------------|---------------|-------------|----------------|--------------|--------|------|--------------|-------|------------------|------|
| Benzene | < 0.00200 | 0.100 | 0.0896 | 90 | 0.0974 | 97 | 70-130 | 8 | 35 | mg/kg | 09.29.2020 21:10 | |
| Toluene | < 0.00200 | 0.100 | 0.0840 | 84 | 0.0902 | 90 | 70-130 | 7 | 35 | mg/kg | 09.29.2020 21:10 | |
| Ethylbenzene | < 0.00200 | 0.100 | 0.0916 | 92 | 0.0958 | 96 | 71-129 | 4 | 35 | mg/kg | 09.29.2020 21:10 | |
| m,p-Xylenes | < 0.00400 | 0.200 | 0.185 | 93 | 0.196 | 98 | 70-135 | 6 | 35 | mg/kg | 09.29.2020 21:10 | |
| o-Xylene | < 0.00200 | 0.100 | 0.0929 | 93 | 0.0991 | 99 | 71-133 | 6 | 35 | mg/kg | 09.29.2020 21:10 | |
| Surrogate | MB %Rec | MB Flag | | | LCS Flag | LCSI %Re | | | imits | Units | Analysis Date | |
| 1,4-Difluorobenzene | 104 | | 10 | 00 | | 101 | | 70 | -130 | % | 09.29.2020 21:10 | |
| 4-Bromofluorobenzene | 115 | | 10 | 05 | | 114 | | 70 | -130 | % | 09.29.2020 21:10 | |

Analytical Method: BTEX by EPA 8021B Prep Method:

 Seq Number:
 3138453
 Matrix:
 Soil
 Date Prep:
 09.29.2020

 Parent Sample Id:
 673861-001
 MS Sample Id:
 673861-001 S
 MSD Sample Id:
 673861-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|--------------|------------------|-----------------|--------------|------------|---------------|-------------|--------|------|--------------|-------|------------------|------|
| Benzene | < 0.00201 | 0.100 | 0.125 | 125 | 0.0998 | 100 | 70-130 | 22 | 35 | mg/kg | 09.29.2020 21:55 | |
| Toluene | < 0.00201 | 0.100 | 0.120 | 120 | 0.0953 | 95 | 70-130 | 23 | 35 | mg/kg | 09.29.2020 21:55 | |
| Ethylbenzene | < 0.00201 | 0.100 | 0.123 | 123 | 0.0975 | 98 | 71-129 | 23 | 35 | mg/kg | 09.29.2020 21:55 | |
| m,p-Xylenes | < 0.00402 | 0.201 | 0.248 | 123 | 0.195 | 97 | 70-135 | 24 | 35 | mg/kg | 09.29.2020 21:55 | |
| o-Xylene | < 0.00201 | 0.100 | 0.122 | 122 | 0.0957 | 96 | 71-133 | 24 | 35 | mg/kg | 09.29.2020 21:55 | |

| Surrogate | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date |
|----------------------|------------|------------|-------------|-------------|--------|-------|------------------|
| 1,4-Difluorobenzene | 99 | | 101 | | 70-130 | % | 09.29.2020 21:55 |
| 4-Bromofluorobenzene | 112 | | 114 | | 70-130 | % | 09.29.2020 21:55 |

Phone:

City, State ZIP:

Chain of Custody

Work Order No: 673861

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

| I ININ'SCICOL | 2/3-392-/300) Phoenix,AZ (4 | Tamba FL (813-620-2001) Atlanta GA (770-449-8800) Tamba FL (813-620-2001) | |
|--|--|---|-----------------------|
| Dan Moir | Bill to: (if different) Kyle I ittrell | Kyle I ittrell | |
| i i i i i i i i i i i i i i i i i i i | 4 | Nic Limen | Wo |
| LT Environmental, Inc., Permian office | Company Name: XTO Energy | XTO Energy | Program: HET/DET |
| 3300 North A St. Bldg 1, Unit 222 | Address: | 3100 E Groop St | State of British Link |
| | | 2104 L Glegile St. | State of Project: NM |
| Midland, TX 79705 | City, State ZIP: Carlshad NM | Carlshad NM | Reporting Level II |
| (432) 701-2610 | | | |
| 102) 101-2010 | Email: Idmoir@liteny com rmcafee@lteny com | n rmcafee@ltenv com | Deliverables: EDD |

| | | | 1 | |
|---------------------|---|---------|----------|---|
| Kyle Littrell | Work Order Comments | mments | | |
| NTO I | | | | |
| X10 Energy | Program: UST/PST PRP Brownfields RC Juperfund | elds RC | uperfund | |
| 3104 E Greene St. | State of Project: NM | 1 | I | |
| Carlsbad, NM | Reporting:Level II | ST RRP | eveliv | |
| m rmcafee@ltenv.com | Deliverables: EDD ADaPT | Other | ξ [| [|

Project Manag Company Nam

Chain of Custody

| EA. | LABORATORIES | Houston,TX (281) 240-4200 Midland,TX (432-704-5440) | 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)704-1206 | Work Order No: G + CO (6) | |
|------------------|-------------------------------------|--|--|---|----|
| Droingt Manager | | VM (575-392-7550) Phoenix,AZ (4 | Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000) | www years com | 10 |
| Project Manager: | Dan Moir | Bill to: (if different) | Kyle Littrell | W | 1 |
| Company Name: | LT Environmental Inc Permian office | | | Work Order Comments | |
| | | company Name: XTO Energy | XIO Energy | Program: UST/PST PRP Brownfields PC Important | |
| Audiess. | 3300 North A St. Bldg 1, Unit 222 | Address: | 3104 E Greene St | State of Project: NIM | |
| City, State ZIP: | Midland, TX 79705 | City State 7ID: | Colored | | |
| Dhono: | 100 100 100 | יון, טומוני בודי. | Calisbad, NWI | Reporting:Level II Level III ST/UST RRP Evel IV | |
| Tiolia. | (432) /01-2610 | Email: dmoir@ltenv.com rmcafee@ltenv.com | n rmcafee@ltenv.com | Deliverables: EDD AD-DT D: | |
| Project No. | コンニーニー・コー | | | Cuia. | |

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 09.29.2020 04.45.00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 673861

Analyst:

Temperature Measuring device used: T_NM_007

| | Sample Receipt Checklist | | Comments |
|---|--------------------------|-----|--------------------------------------|
| #1 *Temperature of cooler(s)? | | 3 | |
| #2 *Shipping container in good condition? | | Yes | |
| #3 *Samples received on ice? | | Yes | |
| #4 *Custody Seals intact on shipping contai | ner/ 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 relinquish | ned/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | abels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers. |
| #13 Samples properly preserved? | | Yes | 00111011101 |
| #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 headsp | ace? | N/A | |

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

Checklist completed by:

Cloe Clifton

Checklist reviewed by:

Jessica Kramer

Date: 09.29.2020

Date: 09.30.2020

PH Device/Lot#:

eurofins Environment Testing

Certificate of Analysis Summary 674465

LT Environmental, Inc., Arvada, CO

Project Name: Row 4 Wolvene SWD Riser

Project Id: Contact:

Project Location:

012920091

Dan Moir

Date Received in Lab: Tue 10.06.2020 16:43

Report Date: 11.06.2020 10:40

Project Manager: Jessica Kramer

| | Lab Id: | 671165 (| 201 | 674465-0 | 02 | 671165 (| 202 | 671165 (| 204 | |
|------------------------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|---------|--|
| | | | | | | 674465-003 | | 674465-004 | | |
| Analysis Requested | Field Id: | PH08 | | PH08A | ١ | PH09 | | PH09A | | |
| | Depth: | 2- ft | | 4- ft | | 1- ft | | 4- ft | | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | |
| Sampled | | 10.06.2020 11:53 | | 10.06.2020 | 11:56 | 10.06.2020 12:50 | | 10.06.2020 12:59 | | |
| BTEX by EPA 8021B Extracted: | | 10.06.2020 17:37 | | 10.06.2020 17:37 | | 10.06.2020 17:37 | | 10.06.2020 17:37 | | |
| | Analyzed: | 10.07.2020 | 10:24 | 10.07.2020 | 10:46 | 10.07.2020 | 11:08 | 10.07.2020 | 11:31 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | |
| Benzene | | < 0.00198 | 0.00198 | < 0.00199 | 0.00199 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | |
| Toluene | < 0.00198 | 0.00198 | < 0.00199 | 0.00199 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | | |
| Ethylbenzene | | < 0.00198 | 0.00198 | < 0.00199 | 0.00199 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | |
| m,p-Xylenes | | < 0.00397 | 0.00397 | | 0.00398 | < 0.00402 | 0.00402 | < 0.00401 | 0.00401 | |
| o-Xylene | | < 0.00198 | 0.00198 | | 0.00199 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | |
| Total Xylenes | | < 0.00198 | 0.00198 | | 0.00199 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | |
| Total BTEX | < 0.00198 | 0.00198 | < 0.00199 | 0.00199 | < 0.00201 | 0.00201 | < 0.00200 | 0.00200 | | |
| Chloride by EPA 300 Extracted: | | 10.06.2020 18:39 | | 10.06.2020 18:39 | | 10.06.2020 18:39 | | 10.06.2020 18:39 | | |
| Analyzed: | | 10.06.2020 19:44 | | 10.06.2020 20:02 | | 10.06.2020 20:08 | | 10.06.2020 20:14 | | |
| Units/RL | | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | |
| Chloride | 955 | 9.90 | 112 | 49.8 | 2890 | 50.1 | 199 | 50.2 | | |
| TPH by SW8015 Mod Extracted: | | 10.06.2020 17:30 | | 10.06.2020 17:30 | | 10.06.2020 17:30 | | 10.07.2020 10:30 | | |
| Analyz | | 10.07.2020 00:30 | | 10.07.2020 00:50 | | 10.07.2020 01:11 | | 10.07.2020 11:37 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | |
| Gasoline Range Hydrocarbons (GRO) | | <50.3 | 50.3 | <49.8 | 49.8 | < 50.2 | 50.2 | < 50.0 | 50.0 | |
| Diesel Range Organics (DRO) | | <50.3 | 50.3 | <49.8 | 49.8 | < 50.2 | 50.2 | < 50.0 | 50.0 | |
| Motor Oil Range Hydrocarbons (MRO) | | <50.3 | 50.3 | <49.8 | 49.8 | < 50.2 | 50.2 | < 50.0 | 50.0 | |
| Total GRO-DRO | | < 50.3 | 50.3 | <49.8 | 49.8 | < 50.2 | 50.2 | < 50.0 | 50.0 | |
| Total TPH | | <50.3 | 50.3 | <49.8 | 49.8 | < 50.2 | 50.2 | < 50.0 | 50.0 | |

BRL - Below Reporting Limit

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

Jessica Vramer

Analytical Report 674465

for

LT Environmental, Inc.

Project Manager: Dan Moir

Row 4 Wolvene SWD Riser 012920091 11.06.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



11.06.2020

Project Manager: **Dan Moir LT Environmental, Inc.**4600 W. 60th Avenue
Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 674465

Row 4 Wolvene SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 674465. 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 Eurofins Xenco, LLC. 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. 674465 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 674465

LT Environmental, Inc., Arvada, CO

Row 4 Wolvene SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| PH08 | S | 10.06.2020 11:53 | 2 ft | 674465-001 |
| PH08A | S | 10.06.2020 11:56 | 4 ft | 674465-002 |
| PH09 | S | 10.06.2020 12:50 | 1 ft | 674465-003 |
| PH09A | S | 10.06.2020 12:59 | 4 ft | 674465-004 |

Page 183 of 520

CASE NARRATIVE

eurofins **Environment Testing** Xenco

Client Name: LT Environmental, Inc. Project Name: Row 4 Wolvene SWD Riser

Project ID: Report Date: 11.06.2020 012920091 Work Order Number(s): 674465 Date Received: 10.06.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



LT Environmental, Inc., Arvada, CO

Row 4 Wolvene SWD Riser

Sample Id: PH08

Matrix: Soil

Date Received:10.06.2020 16:43

Lab Sample Id: 674465-001

Date Collected: 10.06.2020 11:53

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst:

MAB

Date Prep: 10.06.2020 18:39

% Moisture:

Seq Number: 3139047

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 955 | 9.90 | mg/kg | 10.06.2020.19:44 | | 1 |

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

Analyst: DTH
Seq Number: 3139030

Date Prep: 10.06.2020 17:30

% Moisture:

Basis:

Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <50.3 | 50.3 | | mg/kg | 10.07.2020 00:30 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.3 | 50.3 | | mg/kg | 10.07.2020 00:30 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.3 | 50.3 | | mg/kg | 10.07.2020 00:30 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.3 | 50.3 | | mg/kg | 10.07.2020 00:30 | U | 1 |
| Total TPH | PHC635 | <50.3 | 50.3 | | mg/kg | 10.07.2020 00:30 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | F |
|----------------|------------|------------|-------|--------|----------------------|---|
| 1-Chlorooctane | 111-85-3 | 102 | % | 70-135 | 10.07.2020 00:30 | |
| o-Terphenyl | 84-15-1 | 86 | % | 70-135 | 10.07.2020 00:30 | |

Wet Weight

Certificate of Analytical Results 674465

LT Environmental, Inc., Arvada, CO

Row 4 Wolvene SWD Riser

Sample Id: PH08 Matrix: Soil Date Received:10.06.2020 16:43

Lab Sample Id: 674465-001 Date Collected: 10.06.2020 11:53 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|---------------|-------------|-----------|------------|-------|--------|------------------|------|-----|
| Benzene | 71-43-2 | < 0.00198 | 0.00198 | | mg/kg | 10.07.2020 10:24 | U | 1 |
| Toluene | 108-88-3 | < 0.00198 | 0.00198 | | mg/kg | 10.07.2020 10:24 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00198 | 0.00198 | | mg/kg | 10.07.2020 10:24 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00397 | 0.00397 | | mg/kg | 10.07.2020 10:24 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00198 | 0.00198 | | mg/kg | 10.07.2020 10:24 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00198 | 0.00198 | | mg/kg | 10.07.2020 10:24 | U | 1 |
| Total BTEX | | < 0.00198 | 0.00198 | | mg/kg | 10.07.2020 10:24 | U | 1 |
| Surrogate | C | as Number | % Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag |
|----------------------|------------|------------|-------|--------|----------------------|------|
| 4-Bromofluorobenzene | 460-00-4 | 110 | % | 70-130 | 10.07.2020 10:24 | |
| 1,4-Difluorobenzene | 540-36-3 | 100 | % | 70-130 | 10.07.2020 10:24 | |



LT Environmental, Inc., Arvada, CO

Row 4 Wolvene SWD Riser

Sample Id: PH08A

Seq Number: 3139047

Matrix: Soil Date Received:10.06.2020 16:43

Lab Sample Id: 674465-002

Date Collected: 10.06.2020 11:56

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

Analyst:

MAB

MAB

Date Prep:

10.06.2020 18:39

% Moisture:

Basis:

Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 112 | 49.8 | mg/kg | 10.06.2020 20:02 | | 5 |

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

DTH Analyst: Seq Number: 3139030 Date Prep: 10.06.2020 17:30 % Moisture:

Basis:

Wet Weight

| Parameter | Cas Number | Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|-------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.8 | 49.8 | | mg/kg | 10.07.2020 00:50 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.8 | 49.8 | | mg/kg | 10.07.2020 00:50 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.8 | 49.8 | | mg/kg | 10.07.2020 00:50 | U | 1 |
| Total GRO-DRO | PHC628 | <49.8 | 49.8 | | mg/kg | 10.07.2020 00:50 | U | 1 |
| Total TPH | PHC635 | <49.8 | 49.8 | | mg/kg | 10.07.2020 00:50 | U | 1 |
| Surrogate | C | as Number 0 | 6 Recovery | Units | Limits | Analysis Date | Flag | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date |
|----------------|------------|------------|-------|--------|------------------|
| 1-Chlorooctane | 111-85-3 | 106 | % | 70-135 | 10.07.2020 00:50 |
| o-Terphenyl | 84-15-1 | 102 | % | 70-135 | 10.07.2020 00:50 |

LT Environmental, Inc., Arvada, CO

Row 4 Wolvene SWD Riser

Sample Id: PH08A Matrix: Soil Date Received:10.06.2020 16:43

Lab Sample Id: 674465-002 Date Collected: 10.06.2020 11:56 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 10.06.2020 17:37 % Moisture:

Seq Number: 3139044

Basis: Wet Weight

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|----------------------|-------------|------------|------------|-------|--------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00199 | 0.00199 | | mg/kg | 10.07.2020 10:46 | U | 1 |
| Toluene | 108-88-3 | < 0.00199 | 0.00199 | | mg/kg | 10.07.2020 10:46 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00199 | 0.00199 | | mg/kg | 10.07.2020 10:46 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00398 | 0.00398 | | mg/kg | 10.07.2020 10:46 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00199 | 0.00199 | | mg/kg | 10.07.2020 10:46 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00199 | 0.00199 | | mg/kg | 10.07.2020 10:46 | U | 1 |
| Total BTEX | | < 0.00199 | 0.00199 | | mg/kg | 10.07.2020 10:46 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 4-Bromofluorobenzene | | 460-00-4 | 112 | % | 70-130 | 10.07.2020 10:46 | | |
| 1,4-Difluorobenzene | | 540-36-3 | 103 | % | 70-130 | 10.07.2020 10:46 | | |



LT Environmental, Inc., Arvada, CO

Row 4 Wolvene SWD Riser

Sample Id: PH09 Matrix: Soil Date Received:10.06.2020 16:43

Lab Sample Id: 674465-003 Date Collected: 10.06.2020 12:50 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Seq Number: 3139047

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 2890 | 50.1 | mg/kg | 10.06.2020 20:08 | | 5 |

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH

Seq Number: 3139030

Analyst: DTH Date Prep: 10.06.2020 17:30 % Moisture:

Basis: Wet Weight

Cas Number Result RL**Parameter** Units **Analysis Date** Flag Dil Gasoline Range Hydrocarbons (GRO) PHC610 U < 50.2 50.2 10.07.2020 01:11 mg/kg Diesel Range Organics (DRO) C10C28DRO < 50.2 50.2 10.07.2020 01:11 U mg/kg 1 Motor Oil Range Hydrocarbons (MRO) mg/kg 10.07.2020 01:11 U PHCG2835 < 50.2 50.2 1 Total GRO-DRO PHC628 < 50.2 50.2 mg/kg 10.07.2020 01:11 U Total TPH PHC635 < 50.2 50.2 10.07.2020 01:11 U mg/kg 1

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag |
|----------------|------------|------------|-------|--------|----------------------|------|
| 1-Chlorooctane | 111-85-3 | 93 | % | 70-135 | 10.07.2020 01:11 | |
| o-Terphenyl | 84-15-1 | 100 | % | 70-135 | 10.07.2020 01:11 | |

Wet Weight



Certificate of Analytical Results 674465

LT Environmental, Inc., Arvada, CO

Row 4 Wolvene SWD Riser

Sample Id: PH09 Matrix: Soil Date Received:10.06.2020 16:43

Lab Sample Id: 674465-003 Date Collected: 10.06.2020 12:50 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

| Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-------------|---|--|---------|----------------------|---------|---------|
| 71-43-2 | < 0.00201 | 0.00201 | mg/kg | 10.07.2020 11:08 | U | 1 |
| 108-88-3 | < 0.00201 | 0.00201 | mg/kg | 10.07.2020 11:08 | U | 1 |
| 100-41-4 | < 0.00201 | 0.00201 | mg/kg | 10.07.2020 11:08 | U | 1 |
| 179601-23-1 | < 0.00402 | 0.00402 | mg/kg | 10.07.2020 11:08 | U | 1 |
| 95-47-6 | < 0.00201 | 0.00201 | mg/kg | 10.07.2020 11:08 | U | 1 |
| 1330-20-7 | < 0.00201 | 0.00201 | mg/kg | 10.07.2020 11:08 | U | 1 |
| | < 0.00201 | 0.00201 | mg/kg | 10.07.2020 11:08 | U | 1 |
| | 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6 | 71-43-2 <0.00201 108-88-3 <0.00201 100-41-4 <0.00201 179601-23-1 <0.00402 95-47-6 <0.00201 1330-20-7 <0.00201 | 71-43-2 | 71-43-2 | 71-43-2 | 71-43-2 |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag |
|----------------------|------------|------------|-------|--------|----------------------|------|
| 4-Bromofluorobenzene | 460-00-4 | 114 | % | 70-130 | 10.07.2020 11:08 | |
| 1,4-Difluorobenzene | 540-36-3 | 104 | % | 70-130 | 10.07.2020 11:08 | |



LT Environmental, Inc., Arvada, CO

Row 4 Wolvene SWD Riser

Sample Id: PH09A Matrix:

Date Received:10.06.2020 16:43

Lab Sample Id: 674465-004

Soil Date Collected: 10.06.2020 12:59

10.06.2020 18:39

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

MAB

Date Prep:

% Moisture:

Basis:

Wet Weight

MAB Analyst:

Seq Number: 3139047

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 199 | 50.2 | mg/kg | 10.06.2020 20:14 | | 5 |

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

10.07.2020 11:37

Tech:

DTH

DTH Analyst:

10.07.2020 10:30 Date Prep:

% Moisture:

Basis:

70-135

Wet Weight

Seq Number: 3139072

o-Terphenyl

| Parameter | Cas Number | r Result | RL | | Units | Analysis Date | Flag | Dil |
|------------------------------------|------------|------------|------------|-------|--------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | < 50.0 | 50.0 | | mg/kg | 10.07.2020 11:37 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | < 50.0 | 50.0 | | mg/kg | 10.07.2020 11:37 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | < 50.0 | 50.0 | | mg/kg | 10.07.2020 11:37 | U | 1 |
| Total GRO-DRO | PHC628 | < 50.0 | 50.0 | | mg/kg | 10.07.2020 11:37 | U | 1 |
| Total TPH | PHC635 | <50.0 | 50.0 | | mg/kg | 10.07.2020 11:37 | U | 1 |
| Surrogate | | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag | |
| 1-Chlorooctane | | 111-85-3 | 124 | % | 70-135 | 10.07.2020 11:37 | | |

117

84-15-1

Wet Weight



Certificate of Analytical Results 674465

LT Environmental, Inc., Arvada, CO

Row 4 Wolvene SWD Riser

Sample Id: PH09A Matrix: Soil Date Received:10.06.2020 16:43

Lab Sample Id: 674465-004 Date Collected: 10.06.2020 12:59 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 10.06.2020 17:37 % Moisture: Basis:

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---------------|-------------|-----------|---------|-------|----------------------|------|-----|
| Benzene | 71-43-2 | < 0.00200 | 0.00200 | mg/kg | 10.07.2020 11:31 | U | 1 |
| Toluene | 108-88-3 | < 0.00200 | 0.00200 | mg/kg | 10.07.2020 11:31 | U | 1 |
| Ethylbenzene | 100-41-4 | < 0.00200 | 0.00200 | mg/kg | 10.07.2020 11:31 | U | 1 |
| m,p-Xylenes | 179601-23-1 | < 0.00401 | 0.00401 | mg/kg | 10.07.2020 11:31 | U | 1 |
| o-Xylene | 95-47-6 | < 0.00200 | 0.00200 | mg/kg | 10.07.2020 11:31 | U | 1 |
| Total Xylenes | 1330-20-7 | < 0.00200 | 0.00200 | mg/kg | 10.07.2020 11:31 | U | 1 |
| Total BTEX | | < 0.00200 | 0.00200 | mg/kg | 10.07.2020 11:31 | U | 1 |
| | | | | | | | |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag |
|----------------------|------------|------------|-------|--------|----------------------|------|
| 4-Bromofluorobenzene | 460-00-4 | 114 | % | 70-130 | 10.07.2020 11:31 | |
| 1,4-Difluorobenzene | 540-36-3 | 101 | % | 70-130 | 10.07.2020 11:31 | |



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. **ND** Not Detected.

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

Final 1.001

QC Summary 674465

LT Environmental, Inc.

Row 4 Wolvene SWD Riser

Analytical Method: Chloride by EPA 300

Seg Number: 3139047

MB Sample Id:

7712757-1-BLK

Matrix: Solid

%Rec

E300P Prep Method:

Date Prep: 10.06.2020

LCSD Sample Id: 7712757-1-BSD

LCS RPD MB Spike LCS Limits %RPD Units Analysis LCSD LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date

Chloride <10.0 250 104 262 90-110 0 20 10.06.2020 19:32 261 105 mg/kg

LCS Sample Id: 7712757-1-BKS

Analytical Method: Chloride by EPA 300

Seq Number: 3139047 Parent Sample Id:

Matrix: Soil 674465-001

Result

Amount

Result

MS Sample Id: 674465-001 S

E300P Prep Method:

Limit

Date Prep: 10.06.2020 MSD Sample Id: 674465-001 SD

Date

Flag

Flag

Flag

Parent Spike MS MS MSD MSD Limits %RPD RPD Units Analysis **Parameter** Flag

Result

10.06.2020 19:50 Chloride 955 198 1140 93 1150 98 90-110 1 20 mg/kg

%Rec

Analytical Method: TPH by SW8015 Mod

3139030 Seq Number:

Matrix: Solid

SW8015P Prep Method:

Date Prep: 10.06.2020

LCS Sample Id: 7712740-1-BKS LCSD Sample Id: 7712740-1-BSD MB Sample Id: 7712740-1-BLK

MB Spike **RPD** LCS LCS %RPD Units LCSD LCSD Limits Analysis Parameter Result %Rec Limit Date Result Amount Result %Rec 10.06.2020 11:04 Gasoline Range Hydrocarbons (GRO) 35 < 50.0 1000 1140 114 1150 115 70-135 1 mg/kg Diesel Range Organics (DRO) < 50.0 1000 1060 106 1090 70-135 3 35 10.06.2020 11:04 109 mg/kg

MB MB LCS LCS LCSD Limits Units Analysis LCSD **Surrogate** Flag Flag %Rec %Rec Flag %Rec Date 10.06.2020 11:04 1-Chlorooctane 95 117 115 70-135 % o-Terphenyl 86 83 85 70-135 % 10.06.2020 11:04

Analytical Method: TPH by SW8015 Mod

Seq Number:

MB Sample Id:

3139072

7712800-1-BLK

Matrix: Solid

LCS Sample Id: 7712800-1-BKS

Prep Method: SW8015P

> Date Prep: 10.07.2020

LCSD Sample Id: 7712800-1-BSD

%RPD RPD MB Spike LCS LCS LCSD LCSD Limits Units Analysis **Parameter** %Rec Result Limit Result Date Amount Result %Rec Gasoline Range Hydrocarbons (GRO) 10.07.2020 10:37 < 50.0 1000 1210 121 1170 117 70-135 3 35 mg/kg 10.07.2020 10:37 1340 134 1310 70-135 2 Diesel Range Organics (DRO) < 50.0 1000 131 35 mg/kg

MB MB LCS LCS LCSD Limits Units Analysis LCSD **Surrogate** %Rec Flag %Rec Flag %Rec Flag Date 10.07.2020 10:37 129 1-Chlorooctane 108 124 70-135 % 10.07.2020 10:37 o-Terphenyl 113 111 70-135 % 104

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139030 Matrix: Solid

Prep Method: Date Prep: SW8015P 10.06.2020

MB Sample Id: 7712740-1-BLK

MB Units Analysis **Parameter** Date Result Motor Oil Range Hydrocarbons (MRO) 10.06.2020 11:44 < 50.0 mg/kg

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery

Log Difference

[D] = 100*(C-A) / BRPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result

= MS/LCS Result = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

Flag

Flag

Flag

Flag

QC Summary 674465

LT Environmental, Inc.

Row 4 Wolvene SWD Riser

Analytical Method: TPH by SW8015 Mod

Seg Number: 3139072 Matrix: Solid

SW8015P Prep Method:

Date Prep: 10.07.2020

MB Sample Id: 7712800-1-BLK

MB **Parameter** Result

< 50.0

Units Analysis Date

10.07.2020 10:17 mg/kg

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139030

Motor Oil Range Hydrocarbons (MRO)

Matrix: Soil

Prep Method: Date Prep: 10.06.2020

SW8015P

Parent Sample Id: 674445-003

MS Sample Id: 674445-003 S MSD Sample Id: 674445-003 SD

Parent Spike MS MS MSD Limits %RPD RPD Units Analysis MSD **Parameter** Result Amount Result %Rec %Rec Limit Date Result Gasoline Range Hydrocarbons (GRO) 35 10.06.2020 19:27 < 50.1 1000 1340 134 1320 133 70-135 2 mg/kg 10.06.2020 19:27 Diesel Range Organics (DRO) < 50.1 1000 1210 121 1240 125 70-135 2 35 mg/kg

MS MSD MS MSD Limits Units Analysis Surrogate %Rec Flag Flag Date %Rec 129 131 70-135 % 10.06.2020 19:27 1-Chlorooctane 70-135 % 10.06.2020 19:27 o-Terphenyl 123 116

Analytical Method: TPH by SW8015 Mod

3139072 Seq Number:

Matrix: Soil

Prep Method:

SW8015P

Parent Sample Id: 674465-004 MS Sample Id: 674465-004 S

Date Prep: 10.07.2020 MSD Sample Id: 674465-004 SD

Parent Spike MS MS %RPD RPD MSD MSD Limits Units Analysis **Parameter** Limit Result Amount Result %Rec Result %Rec Date Gasoline Range Hydrocarbons (GRO) < 50.2 1000 968 97 1110 70-135 14 35 10.07.2020 12:18 110 mg/kg Diesel Range Organics (DRO) < 50.2 1000 1150 115 1290 128 70-135 11 35 mg/kg 10.07.2020 12:18

MSD MS MS Units Analysis **MSD** Limits Surrogate %Rec Flag Flag Date %Rec 10.07.2020 12:18 1-Chlorooctane 127 131 70 - 135% 10.07.2020 12:18 o-Terphenyl 120 129 70-135 %

Analytical Method: BTEX by EPA 8021B

3139044

Matrix: Solid

Prep Method:

SW5035A

Seq Number: MB Sample Id:

7712749-1-BLK

LCS Sample Id: 7712749-1-BKS

Date Prep: LCSD Sample Id: 7712749-1-BSD

10.06.2020

Spike LCS %RPD RPD MB LCS Units Limits Analysis LCSD LCSD Parameter Result Amount Result %Rec Limit Date %Rec Result

10.07.2020 02:31 Benzene 0.0891 0.0928 70-130 4 35 < 0.00200 0.100 89 93 mg/kg mg/kg 10.07.2020 02:31 Toluene < 0.00200 0.100 0.0853 85 0.0887 89 70-130 4 35 10.07.2020 02:31 35 Ethylbenzene < 0.00200 0.1000.0885 89 0.0912 91 71-129 3 mg/kg 10.07.2020 02:31 m,p-Xylenes < 0.00400 0.200 0.178 89 0.186 93 70-135 4 35 mg/kg 10.07.2020 02:31 o-Xylene < 0.00200 0.100 0.0868 87 0.0949 95 71-133 9 35 mg/kg

MB LCS LCSD LCS Limits Units MB **Analysis** LCSD Surrogate %Rec Flag %Rec Flag Flag Date %Rec 10.07.2020 02:31 1.4-Difluorobenzene 107 102 98 70-130 % 10.07.2020 02:31 105 4-Bromofluorobenzene 107 70-130 114 %

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / B $RPD = 200* \mid (C-E) \mid (C+E) \mid$ [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result

= MS/LCS Result = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

QC Summary 674465

eurofins **Environment Testing** Xenco

LT Environmental, Inc.

Row 4 Wolvene SWD Riser

Analytical Method: BTEX by EPA 8021B SW5035A Prep Method: 3139044 Matrix: Soil Seq Number: Date Prep: 10.06.2020 MS Sample Id: 674445-007 S Parent Sample Id: 674445-007 MSD Sample Id: 674445-007 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|----------------------|------------------|-----------------|--------------|------------|---------------|-------------|--------|------|--------------|-------|------------------|------|
| Benzene | < 0.00200 | 0.100 | 0.113 | 113 | 0.109 | 109 | 70-130 | 4 | 35 | mg/kg | 10.07.2020 03:15 | |
| Toluene | < 0.00200 | 0.100 | 0.107 | 107 | 0.0994 | 99 | 70-130 | 7 | 35 | mg/kg | 10.07.2020 03:15 | |
| Ethylbenzene | < 0.00200 | 0.100 | 0.110 | 110 | 0.108 | 108 | 71-129 | 2 | 35 | mg/kg | 10.07.2020 03:15 | |
| m,p-Xylenes | < 0.00401 | 0.200 | 0.219 | 110 | 0.212 | 106 | 70-135 | 3 | 35 | mg/kg | 10.07.2020 03:15 | |
| o-Xylene | < 0.00200 | 0.100 | 0.109 | 109 | 0.105 | 105 | 71-133 | 4 | 35 | mg/kg | 10.07.2020 03:15 | |
| Surrogate | | | | IS Rec | MS Flag | MSI %Re | | | imits | Units | Analysis Date | |
| 1,4-Difluorobenzene | | | 1 | 02 | | 99 | | 70 | -130 | % | 10.07.2020 03:15 | |
| 4-Bromofluorobenzene | | | 1 | 09 | | 106 | ;) | 70 | -130 | % | 10.07.2020 03:15 | |

| 1 | |
|-------------------|------------------|
| I T Environmental | Company Name: |
| | |
| Dan Moir | Project Manager: |
| | |
| | |
| ABORATORIE | - |
| | |
| | |
| | 1 |
| | |

Chain of Custody

Work Order No: 674465

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 Lubb

| | The Chilles | ervice. Xenco will be liable only for the cost of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions and conditions are constituted 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. Received by: (Signature) Received by: (Signature) | Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 A Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA | | | | 6501 N S N 150+10 | ^ | \$ A | Sampled \$ | Sample Identification Matrix Date Time | Sample Custody Seals: Yes \Ne N/A Total Containers: | Yes MO N/A Correc | (Yes No T-N |): 1.2/1.0 Thermometer | SAMPLE RECEIPT Temp Blank: (Yes No Wet Ice: (| Sampler's Name: Jeremy Hill Due Date: | 8 | D | Project Name: Row 4 Wolvens SWO Riser Time | Phone: (432) 236-3849 Email: | ate ZIP: Midland, TX 79705 | 3300 North A Street | Name: LT Environmental, Inc., Permian office | . Dan Woir |
|------|--|--|---|--|--|---|-------------------|---|-----------|-----------------|--|---|-------------------|-------------|------------------------|---|---------------------------------------|---|-----------------------|--|------------------------------|----------------------------|----------------------|--|---------------------------------------|
| 0) & | 16.28 1643 2 | se order from client company to Xenco, its affiliates and subcontractors. It assign sibility for any losses or expenses incurred by the client if such losses are due to ach sample submitted to Xenco, but not analyzed. These terms will be enforced up to the submitted to Xenco, but not analyzed. | Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg | | | * | | 7 | 9 1 2 1 1 | - Nur | nber (EPA | 801 A 0= | 5) 802 | ain | (| (Pas No | ate: | ā | 3 | | , dm | e ZIP: | | | Bill to: (if different) Kyle Littrell |
| | re) Received by: (Signature) Date/Time | | Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn Mn Mo Ni Se Ag Ti U 1631/245.1/7470 /7471 · Hn | | | _ | | | discrete | Sample Comments | lab, if received by 4:30pm | TAT starts the day recevied by the | | | | | | | UEST Work Order Notes | Office Control of Cont | | | Program: UST/PST _RP | | Www.xellco.com rage i of |

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 10.06.2020 04.43.00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 674465

Analyst:

Temperature Measuring device used: T_NM_007

| | 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 contai | ner/ 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 relinquish | ed/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | abels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers. |
| #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 headsp | ace? | N/A | |

| * Must be | completed for | after-hours | delivery of | samples | prior to | placing in | the i | refrigerato | 16 |
|-----------|---------------|-------------|-------------|---------|----------|------------|-------|-------------|----|
| | | | | | | | | | |

| Checklist completed by: | Cloe Clifton | Date: <u>10.06.2020</u> |
|-------------------------|----------------|-------------------------|
| Checklist reviewed by: | Jessica Vramer | Date: 10.07.2020 |

Jessica Kramer

PH Device/Lot#:



Certificate of Analysis Summary 678682 WSP USA, Dallas, TX

Project Name: Row 4 Wolverine SWD Riser

Project Id:

TE012920091

Date Received in Lab: Fri 11.20.2020 16:08

Dan Moir **Contact:**

Report Date: 11.25.2020 07:21

Project Location:

Project Manager: Jessica Kramer

| | Lab Id: | 678682-00 | 01 | 678682-00 | 02 | 678682-00 |)3 | 678682-0 | 04 | 678682-0 | 05 | 678682-00 | 06 |
|---------------------|------------|--------------|-------|--------------|-------|--------------|-------|------------|-------|------------|-------|--------------|-------|
| Analysis Requested | Field Id: | FS01 | | FS02 | | FS03 | | FS04 | | FS05 | | FS06 | |
| muysis Requesicu | Depth: | 3.0- ft | | 3.0- ft | | 2.0-3.0 f | t | 3.0- ft | | 3.0- ft | | 3.0- ft | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | Sampled: | 11.20.2020 1 | 10:03 | 11.20.2020 | 10:07 | 11.20.2020 | 0:12 | 11.20.2020 | 10:16 | 11.20.2020 | 10:20 | 11.20.2020 1 | 10:25 |
| Chloride by EPA 300 | Extracted: | 11.23.2020 1 | 14:15 | 11.23.2020 | 14:15 | 11.23.2020 | 4:15 | 11.23.2020 | 14:15 | 11.23.2020 | 14:15 | 11.23.2020 1 | 14:15 |
| | Analyzed: | 11.23.2020 2 | 21:42 | 11.23.2020 2 | 21:58 | 11.23.2020 2 | 22:03 | 11.23.2020 | 22:08 | 11.23.2020 | 22:14 | 11.23.2020 2 | 22:19 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 15.5 | 10.0 | 62.5 | 9.92 | 24.8 | 9.96 | 49.3 | 9.94 | 17.1 | 9.90 | 263 | 9.98 |

BRL - Below Reporting Limit

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

Jessica Weamer

Certificate of Analysis Summary 678682 WSP USA, Dallas, TX

eurofins
Environment Testing
Xenco

Project Name: Row 4 Wolverine SWD Riser

Project Id:

Project Location:

Contact:

TE012920091

Dan Moir

Date Received in Lab: Fri 11.20.2020 16:08

Report Date: 11.25.2020 07:21

Project Manager: Jessica Kramer

| | Lab Id: | 678682-0 | 07 | 678682-0 | 08 | 678682-0 |)9 | 678682-0 | 10 | 678682-0 | 11 | 678682-01 | 12 |
|---------------------|------------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------------------------------|--------------|-------|
| Analysis Requested | Field Id: | FS07 | | FS08 | | FS09 | | FS10 | | FS11 | 11:51 1 14:15 1 23:05 1 | FS12 | |
| Analysis Requesieu | Depth: | 3.0- ft | | 3.0- ft | |
| | Matrix: | SOIL | | SOIL | |
| | Sampled: | 11.20.2020 | 10:30 | 11.20.2020 | 10:34 | 11.20.2020 | 10:37 | 11.20.2020 | 10:41 | 11.20.2020 | 11:51 | 11.20.2020 1 | 11:55 |
| Chloride by EPA 300 | Extracted: | 11.23.2020 | 14:15 | 11.23.2020 | 14:15 | 11.23.2020 | 14:15 | 11.23.2020 | 14:15 | 11.23.2020 | 14:15 | 11.23.2020 1 | 14:15 |
| | Analyzed: | 11.23.2020 | 22:24 | 11.23.2020 | 22:39 | 11.23.2020 | 22:45 | 11.23.2020 | 23:00 | 11.23.2020 | 23:05 | 11.23.2020 2 | 23:10 |
| | Units/RL: | mg/kg | RL | mg/kg | RL |
| Chloride | | 308 | 9.92 | 185 | 9.98 | 49.3 | 9.98 | 452 | 9.96 | 352 | 9.90 | 249 | 9.90 |

BRL - Below Reporting Limit

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

Jessica Vermer

Certificate of Analysis Summary 678682 WSP USA, Dallas, TX

eurofins Environment Testing

Project Name: Row 4 Wolverine SWD Riser

Project Id:

Project Location:

TE012920091

Date Received in Lab: Fri 11.20.2020 16:08

Dan Moir **Contact:**

Report Date: 11.25.2020 07:21

Project Manager: Jessica Kramer

| | Lab Id: | 678682-0 | 13 | 678682-0 | 14 | 678682-0 | 15 | 678682-0 | 16 | 678682-0 | 017 | |
|---------------------|------------|------------|------------------|------------------|-------|------------|-------|------------|-------|------------|-------|--|
| Analysis Requested | Field Id: | FS13 | | FS14 | | FS15 | | FS16 | | FS17 | | |
| muysis Requesicu | Depth: | 3.0- ft | | 3.0- ft | | 2.0- ft | | 3.0- ft | | 2.0-3.0 | ft | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | |
| | Sampled: | 11.20.2020 | 11.20.2020 12:04 | | 12:08 | 11.20.2020 | 13:18 | 11.20.2020 | 13:24 | 11.20.2020 | 13:31 | |
| Chloride by EPA 300 | Extracted: | 11.23.2020 | 14:15 | 11.23.2020 14:15 | | 11.23.2020 | 14:15 | 11.23.2020 | 14:15 | 11.23.2020 | 07:59 | |
| | Analyzed: | 11.23.2020 | 23:16 | 11.23.2020 | 23:21 | 11.23.2020 | 23:26 | 11.23.2020 | 23:31 | 11.23.2020 | 17:49 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | |
| Chloride | | 404 | 10.1 | 441 | 10.0 | 197 | 9.98 | 201 | 9.98 | 50.9 | 9.98 | |

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 678682

for

WSP USA

Project Manager: Dan Moir

Row 4 Wolverine SWD Riser TE012920091 11.25.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



11.25.2020

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 678682

Row 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 678682. 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 Eurofins Xenco, LLC. 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. 678682 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 678682

WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| FS01 | S | 11.20.2020 10:03 | 3.0 ft | 678682-001 |
| FS02 | S | 11.20.2020 10:07 | 3.0 ft | 678682-002 |
| FS03 | S | 11.20.2020 10:12 | 2.0 - 3.0 ft | 678682-003 |
| FS04 | S | 11.20.2020 10:16 | 3.0 ft | 678682-004 |
| FS05 | S | 11.20.2020 10:20 | 3.0 ft | 678682-005 |
| FS06 | S | 11.20.2020 10:25 | 3.0 ft | 678682-006 |
| FS07 | S | 11.20.2020 10:30 | 3.0 ft | 678682-007 |
| FS08 | S | 11.20.2020 10:34 | 3.0 ft | 678682-008 |
| FS09 | S | 11.20.2020 10:37 | 3.0 ft | 678682-009 |
| FS10 | S | 11.20.2020 10:41 | 3.0 ft | 678682-010 |
| FS11 | S | 11.20.2020 11:51 | 3.0 ft | 678682-011 |
| FS12 | S | 11.20.2020 11:55 | 3.0 ft | 678682-012 |
| FS13 | S | 11.20.2020 12:04 | 3.0 ft | 678682-013 |
| FS14 | S | 11.20.2020 12:08 | 3.0 ft | 678682-014 |
| FS15 | S | 11.20.2020 13:18 | 2.0 ft | 678682-015 |
| FS16 | S | 11.20.2020 13:24 | 3.0 ft | 678682-016 |
| FS17 | S | 11.20.2020 13:31 | 2.0 - 3.0 ft | 678682-017 |

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA

Project Name: Row 4 Wolverine SWD Riser

 Project ID:
 TE012920091
 Report Date:
 11.25.2020

 Work Order Number(s):
 678682
 Date Received:
 11.20.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS01 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-001 Date Collected: 11.20.2020 10:03 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 15.5 | 10.0 | mg/kg | 11.23.2020 21:42 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS02 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-002 Date Collected: 11.20.2020 10:07 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 62.5 | 9.92 | mg/kg | 11.23.2020 21:58 | | 1 | _ |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS03 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-003 Date Collected: 11.20.2020 10:12 Sample Depth: 2.0 - 3.0 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB Date Prep: 11.23.202

ep: 11.23.2020 14:15 % Moisture:

Prep Method: E300P

Seq Number: 3143168

Date Prep: 11.25.2020 14:13

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 24.8 | 9.96 | mg/kg | 11.23.2020 22:03 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS04 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-004 Date Collected: 11.20.2020 10:16 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 49.3 | 9.94 | mg/kg | 11.23.2020 22:08 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS05 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-005 Date Collected: 11.20.2020 10:20 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 17.1 | 9.90 | mg/kg | 11.23.2020 22:14 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS06 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-006 Date Collected: 11.20.2020 10:25 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 263 | 9.98 | mg/kg | 11.23.2020 22:19 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS07 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-007 Date Collected: 11.20.2020 10:30 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 308 | 9.92 | mg/kg | 11.23.2020 22:24 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS08 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-008 Date Collected: 11.20.2020 10:34 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 185 | 9.98 | mg/kg | 11.23.2020 22:39 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS09 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-009 Date Collected: 11.20.2020 10:37 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 49.3 | 9.98 | mg/kg | 11.23.2020 22:45 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS10 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-010 Date Collected: 11.20.2020 10:41 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 452 | 9.96 | mg/kg | 11.23.2020 23:00 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS11 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-011 Date Collected: 11.20.2020 11:51 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|--|
| Chloride | 16887-00-6 | 352 | 9.90 | mg/kg | 11.23.2020 23:05 | | 1 | |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS12 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-012 Date Collected: 11.20.2020 11:55 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 249 | 9.90 | mg/kg | 11.23.2020 23:10 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS13 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-013 Date Collected: 11.20.2020 12:04 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 404 | 10.1 | mg/kg | 11.23.2020 23:16 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS14 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-014 Date Collected: 11.20.2020 12:08 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 441 | 10.0 | mg/kg | 11.23.2020 23:21 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS15 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-015 Date Collected: 11.20.2020 13:18 Sample Depth: 2.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 197 | 9.98 | mg/kg | 11.23.2020 23:26 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: FS16 Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-016 Date Collected: 11.20.2020 13:24 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 11.23.2020 14:15 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 201 | 9.98 | mg/kg | 11.23.2020 23:31 | | 1 |

FS17



Certificate of Analytical Results 678682

WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Matrix: Soil Date Received:11.20.2020 16:08

Lab Sample Id: 678682-017 Date Collected: 11.20.2020 13:31 Sample Depth: 2.0 - 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Sample Id:

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 50.9 | 9.98 | mg/kg | 11.23.2020 17:49 | | 1 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

^{**} Surrogate recovered outside laboratory control limit.

QC Summary 678682

WSP USA

| | | | | F | Row 4 V | Wolverine | e SWD | Riser | | | | | |
|--|---------------------------------------|------------------|-----------------|-----------------|-----------------|---------------------|----------------|--------|------|--|-----------------------|-----------------------------------|------|
| Analytical Method: Seq Number: MB Sample Id: | Chloride by 3143166 7715707-1- | | 00 | | Matrix: | Solid 7715707- | 1-BKS | | | rep Metho Date Pro D Sample | ep: 11.2 | 00P 23.2020 5707-1-BSD | |
| Parameter | | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
| Chloride | | <10.0 | 250 | 245 | 98 | 241 | 96 | 90-110 | 2 | 20 | mg/kg | 11.23.2020 15:35 | |
| Analytical Method: Seq Number: MB Sample Id: | Chloride by 3143168 7715806-1- | | 00 | | Matrix: | Solid 7715806- | 1-BKS | | | rep Metho Date Pro D Sample | ep: 11.2 | 00P 23.2020 5806-1-BSD | |
| Parameter | | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
| Chloride | | <10.0 | 250 | 244 | 98 | 243 | 97 | 90-110 | 0 | 20 | mg/kg | 11.23.2020 21:01 | |
| Analytical Method: Seq Number: Parent Sample Id: | Chloride by 3143166 678527-006 | | 00 | | Matrix: | Soil 678527-00 | 06 S | | | rep Metho Date Pro D Samplo | ep: 11.2 | 00P 23.2020 527-006 SD | |
| Parameter | | Parent | Spike | MS | MS | MSD | MSD | Limits | %RPD | RPD | Units | Analysis | Flag |
| Chloride | | Result 14900 | Amount 199 | Result 15100 | %Rec 101 | Result 15100 | %Rec 99 | 90-110 | 0 | Limit 20 | mg/kg | Date 11.23.2020 15:50 | 9 |
| Analytical Method: Seq Number: Parent Sample Id: | Chloride by 3143166 678527-016 | | 00 | | Matrix: | Soil 678527-0 | 16 S | | | rep Metho Date Pro D Sample | ep: 11.2 | 00P 23.2020 527-016 SD | |
| Parameter | | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
| Chloride | | 131 | 200 | 331 | 100 | 327 | 99 | 90-110 | 1 | 20 | mg/kg | 11.23.2020 17:03 | |
| Analytical Method: Seq Number: Parent Sample Id: | Chloride by 3143168 678677-021 | , | 00 | | Matrix: | Soil 678677-02 | 21 S | | | rep Metho Date Pro D Samplo | ep: 11.2 | 00P 23.2020 677-021 SD | |
| Parameter | | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
| Chloride | | 122 | 199 | 306 | 92 | 310 | 94 | 90-110 | 1 | 20 | mg/kg | 11.23.2020 21:17 | |
| | | | | | | | | | | | | | |
| Analytical Method: Seq Number: Parent Sample Id: | Chloride by 3143168 678682-007 | y EPA 30 | 00 | | Matrix: | Soil 678682-00 | 07 S | | | rep Metho Date Pro D Sample | ep: 11.2 | 00P 23.2020 682-007 SD | |
| Seq Number: | 3143168 | y EPA 30 | Spike | MS Sar | mple Id: | 678682-00 MSD | MSD | Limits | | Date Properties Date Properties Date Properties RPD | ep: 11.2 | 23.2020 682-007 SD Analysis | Flag |
| Seq Number: Parent Sample Id: | 3143168 | y EPA 30 | | MS Sar | nple Id: | 678682-0 | | | MS | Date Pro D Sample | ep: 11.2 e Id: 678 | 23.2020 6682-007 SD | Flag |

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference [D] = 100*(C-A) / B

RPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec Relinquished by: (Signature)

Received by: (Signature)

1.20.20 16082

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date 051418 Rev. 2018.1

Page 224 of 520

Project Manager: Dan Moir

Chain of Custody

Work Order No: 678682

□RP □rownfields □RC **Work Order Comments**

€perfund

Page_

of d

Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) 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 Address: Bill to: (if different) Company Name: 522 W. Mermod St. XTO Energy Kyle Littrell Program: UST/PST State of Project:

| City, State ZIP: | Midland, TX 79705 | | City, State ZIP: | | Carlsbad, NM 88220 | NM 88 | 0 | Reporting:Level IIevel III | III ST/UST RP Upvel IV |
|---|--|--|---|------------|--------------------|-----------|--|---|------------------------------------|
| Phone: | (432) 236-3849 | Email | Email: Jhill@ltenv.com, dmoir@ltenv.com | n, dmoir | @ltenv. | com | | Deliverables: EDD | ADaPT Other: |
| Project Name: | Row 4 Wolverer Sug | Riser Ti | Turn Around | | | | ANALYSIS REQUEST | JEST | Work Order Notes |
| Project Number: | TEO13430491 | Routine | ine P | | - | | | | |
| P.O. Number: | 50.11 date 6/1/20 | Rush: | n | | | | | | |
| Sampler's Name: | Jeremy Hill | Due Date | Date: | | | to | | | |
| SAMPLE RECEIPT | IPT Temp Blank: Yes | No Wet Ice: | Yes No | | _ | -CT | | | |
| Temperature (°C): | 2.4%.2 | Thermometer ID | <u></u> | ners | | | | | |
| Received Intact: | © No | 00-MM2 | LO | ntai | 21) | 7 | | | |
| Cooler Custody Seals | : Ye | Correction Factor: | 10.2 | | \leq | | | | TAT starts the day recevied by the |
| Sample Custody Seals: | Yes | Total Containers: | I | | × | | | | lab, if received by 4:30pm |
| Sample Identification | Matrix | Date Time Sampled Sampled | Depth | Numbe | BTEX (| Chlorid | Y | | Sample Comments |
| Fsoi | efn S | 8001 00/06/11 | 3.0 | - | | × | | | laperete |
| Cosd | | 1667 | 3,61 | _ | | _ | | | |
| FS03 | | 6101 | 3.6-3.0 | _ | | | | | |
| 4054 | | 1016 | 3.61 | | | | | | |
| FS05 | | lado | 3,01 | | | | | | |
| PSO6 | | 1015 | 3.01 | | | | | | |
| FS67 | | 1030 | 3.00 | | | | | | |
| PS08 | | hg 01 | 3.0" | | | | | | |
| FSO9 | | 1037 | 3,60 | | | | | | |
| 5510 | * | 1401 | 3.01 | 4 | H | 4 | | | |
| Total 200.7 / 6010 | 010 200.8 / 6020: | 00 | 8RCRA 13PPM Texas 11 | A | Al Sb As Ba | Bell | Cu Fe | Mn Mo Ni K Se Ag | SiO2 |
| Circle Method(| Circle Method(s) and Metal(s) to be analyzed | | TCLP / SPLP 6010: 8RCRA | | Sb As Ba Be | 3a Be | Cd Cr Co Cu Pb Mn Mo Ni Se | Vi Se Ag TI U | 1631 / 245.1 / 7470 / 7471 : Hg |
| Notice: Signature of this of service. Xenco will be | volice: 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 | es constitutes a valid possession de la seconstitute de la valid possession de la constitute de la constitut | urchase order from | client cor | npany to | Xenco, it | iffiliates and subcontractors. It assigned by the client if such losses are due to | It assigns standard terms and conditions to due to circumstances beyond the control | |
| of Xenco. A minimum cha | of Xenco. A minimum charge 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. | roject and a charge of \$ | 5 for each sample s | ubmitted | to Xenco | , but not | alyzed. These terms will be enforced | unless previously negotiated. | |

Address: City, State

3300 North A Street

Company Name:

WSP USA

Received by OC Page 225 of 520 Phone: Sampler's Name: P.O. Number: Project Number Project Name: City, State ZIP: Company Name: Project Manager: Address: 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 Sample Custody Seals: Temperature (°C): 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 Received Intact: SAMPLE RECEIPT y Xenco. A minimum charge 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. cooler Custody Seals: Relinquished by: (Signature) Total 200.7 / 6010 Circle Method(s) and Metal(s) to be analyzed 25 = Sample Identification P513 ES19 F517 F516 PSIS アシース Dan Moir Dow 4 Midland, TX 79705 3300 North A Street WSP USA (432) 236-3849 1601929 0021 4.0 Yes Yes 200.8 / 6020: w olvene 1 Z Temp Blank: 0.2 Jeremy Hill No Matrix NA NA Sws SER nelac) 14 Sampled Received by: (Signature) 2150 Date Correction Factor: No Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) Total Containers: 8 W. 8RCRA 13PPM Texas 11 Al Thermometer ID TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 25 Sampled 1308 70 PI

Time

Depth

10.2

Number of Containers

Chloride (EPA 300.0)

BTEX (EPA-0=8021)

Wet Ice: Yes

No

Rush:

Routine

7

Due Date

Email: Jhill@Itenv.com,

City, State ZIP:

Carlsbad, NM 88220 522 W. Mermod St.

Reporting:Level II

evel III

∏RP \pre| IV

ADaPT BT/UST

Deliverables: EDD

Program: UST/PST

□RP □rownfields □RC Work Order Comments

*****□perfund

www.xenco.com

Page_

of

State of Project:

Address:

Company Name: Bill to: (if different)

Kyle Littrell XTO Energy

Turn Around

ANALYSIS REQUEST

1155

3.0.

3.01

3.6

1318 1324 331

2.0

2.0-3.6

6

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

1631 / 245.1 / 7470 / 7471 : Hg

3.0 2.6.

1-20-20

1600

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

10 marson

Sample Comments

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

Work Order Notes

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334

Chain of Custody

Work Order No: 1.78682

Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 11.20.2020 04.08.00 PM

Temperature Measuring device used: T_NM_007 Work Order #: 678682

| | Sample Receipt Checklist | | Comments |
|--|--------------------------|-----|--------------------------------------|
| #1 *Temperature of cooler(s)? | | .2 | |
| #2 *Shipping container in good condition? | | Yes | |
| #3 *Samples received on ice? | | Yes | |
| #4 *Custody Seals intact on shipping contain | ner/ 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 relinquish | ned/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | abels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers. |
| #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 headsp | pace? | N/A | |

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

Checklist completed by: Cloe Clifton Date: 11.20.2020 Checklist reviewed by:

Jessica Kramer

Jessica Kramer

PH Device/Lot#:

Analyst:

Date: 11.23.2020

Certificate of Analysis Summary 678998 eurofins Environment Testing WSP USA, Dallas, TX

Project Name: Row 4 Wolverine SWD Riser

Project Id: Contact:

Project Location:

TE012920091

Dan Moir

Date Received in Lab: Tue 11.24.2020 16:20

Report Date: 11.30.2020 13:53

Project Manager: Jessica Kramer

| | Lab Id: | 678998-0 | 01 | 678998-00 |)2 | 678998-0 | 03 | 678998-0 |)4 | 678998-0 | 05 | 678998-0 | 06 |
|---------------------|------------|------------|------------------|--------------|------|------------------|-------|------------------|------|------------------|-------|------------------|-------|
| Analysis Requested | Field Id: | SW01 | | SW02 | | SW05 | | SW06 | | SW08 | | SW09 | |
| Anatysis Requested | Depth: | 0-3 ft | | 0-3 ft | | 0-3 ft | | 0-3 ft | | 0-4 ft | | 0-4 ft | |
| | Matrix: | SOIL | SOIL | | | SOIL | | SOIL | | SOIL | | SOIL | |
| | Sampled: | 11.24.2020 | 11.24.2020 09:57 | | 0:03 | 11.24.2020 10:29 | | 11.24.2020 10:38 | | 11.24.2020 11:45 | | 11.24.2020 11:52 | |
| Chloride by EPA 300 | Extracted: | 11.25.2020 | 09:36 | 11.25.2020 0 | 9:36 | 11.25.2020 (|)9:36 | 11.25.2020 (| 9:36 | 11.25.2020 | 09:36 | 11.25.2020 | 09:36 |
| | Analyzed: | 11.25.2020 | 11:06 | 11.25.2020 1 | 1:22 | 11.25.2020 | 11:27 | 11.25.2020 | 1:32 | 11.25.2020 | 11:37 | 11.25.2020 | 11:53 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 40.6 | 9.90 | 23.2 | 9.98 | 832 | 9.98 | 18.9 | 10.1 | 15.8 | 10.1 | 111 | 10.1 |

BRL - Below Reporting Limit

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

Jessica Weamer

Certificate of Analysis Summary 678998 WSP USA, Dallas, TX

eurofins
Environment Testing

Project Name: Row 4 Wolverine SWD Riser

Project Id:

Project Location:

Contact:

TE012920091

Dan Moir

Date Received in Lab: Tue 11.24.2020 16:20

Report Date: 11.30.2020 13:53

Project Manager: Jessica Kramer

| | Lab Id: | 678998-0 | 07 | 678998-0 | 08 | 678998-0 |)9 | 678998-0 | 10 | 678998-0 | 11 | 678998-0 | 12 |
|---------------------|------------|------------|--------|--------------|-------|--------------|-------|------------------|-------|------------------|-------|------------------|-------|
| Analysis Requested | Field Id: | SW12 | | SW13 | | SW14 | | SW15 | | SW16 | | SW17 | |
| mulysis Requesicu | Depth: | 0-4 ft | 0-4 ft | | | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | |
| | Matrix: | SOIL | SOIL | | | SOIL | | SOIL | | SOIL | | SOIL | |
| | Sampled: | 11.24.2020 | 12:18 | 11.24.2020 | 12:26 | 11.24.2020 | 13:08 | 11.24.2020 13:17 | | 11.24.2020 13:25 | | 11.24.2020 13:33 | |
| Chloride by EPA 300 | Extracted: | 11.25.2020 | 09:36 | 11.25.2020 (| 09:36 | 11.25.2020 (|)9:36 | 11.25.2020 09:36 | | 11.25.2020 09:36 | | 11.25.2020 09:36 | |
| | Analyzed: | 11.25.2020 | 11:58 | 11.25.2020 | 12:03 | 11.25.2020 | 12:08 | 11.25.2020 | 12:13 | 11.25.2020 | 12:19 | 11.25.2020 | 12:34 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 462 | 9.92 | 359 | 9.98 | 316 | 9.96 | 19.8 | 9.98 | 15.2 | 9.96 | 452 | 9.90 |

BRL - Below Reporting Limit

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

Jessica Vermer



Analytical Report 678998

for

WSP USA

Project Manager: Dan Moir

Row 4 Wolverine SWD Riser TE012920091 11.30.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



11.30.2020

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 678998

Row 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 678998. 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 Eurofins Xenco, LLC. 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. 678998 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 678998

WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW01 | S | 11.24.2020 09:57 | 0 - 3 ft | 678998-001 |
| SW02 | S | 11.24.2020 10:03 | 0 - 3 ft | 678998-002 |
| SW05 | S | 11.24.2020 10:29 | 0 - 3 ft | 678998-003 |
| SW06 | S | 11.24.2020 10:38 | 0 - 3 ft | 678998-004 |
| SW08 | S | 11.24.2020 11:45 | 0 - 4 ft | 678998-005 |
| SW09 | S | 11.24.2020 11:52 | 0 - 4 ft | 678998-006 |
| SW12 | S | 11.24.2020 12:18 | 0 - 4 ft | 678998-007 |
| SW13 | S | 11.24.2020 12:26 | 0 - 4 ft | 678998-008 |
| SW14 | S | 11.24.2020 13:08 | 0 - 4 ft | 678998-009 |
| SW15 | S | 11.24.2020 13:17 | 0 - 4 ft | 678998-010 |
| SW16 | S | 11.24.2020 13:25 | 0 - 4 ft | 678998-011 |
| SW17 | S | 11.24.2020 13:33 | 0 - 4 ft | 678998-012 |

Page 232 of 520

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA

Project Name: Row 4 Wolverine SWD Riser

 Project ID:
 TE012920091
 Report Date:
 11.30.2020

 Work Order Number(s):
 678998
 Date Received:
 11.24.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Page 6 of 23 Final 1.000



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW01 Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-001 Date Collected: 11.24.2020 09:57 Sample Depth: 0 - 3 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 40.6 | 9.90 | mg/kg | 11.25.2020 11:06 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW02 Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-002 Date Collected: 11.24.2020 10:03 Sample Depth: 0 - 3 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 23.2 | 9.98 | mg/kg | 11.25.2020 11:22 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW05 Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-003 Date Collected: 11.24.2020 10:29 Sample Depth: 0 - 3 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 832 | 9.98 | mg/kg | 11.25.2020 11:27 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW06 Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-004 Date Collected: 11.24.2020 10:38 Sample Depth: 0 - 3 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 18.9 | 10.1 | mg/kg | 11.25.2020 11:32 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW08 Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-005 Date Collected: 11.24.2020 11:45 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 15.8 | 10.1 | mg/kg | 11.25.2020 11:37 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW09 Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-006 Date Collected: 11.24.2020 11:52 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 111 | 10.1 | mg/kg | 11.25.2020 11:53 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW12 Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-007 Date Collected: 11.24.2020 12:18 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 462 | 9.92 | mg/kg | 11.25.2020 11:58 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: **SW13** Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-008 Date Collected: 11.24.2020 12:26 Sample Depth: 0 - 4 ft

Prep Method: E300P

Analytical Method: Chloride by EPA 300

Tech: MAB

MAB Analyst:

Date Prep: 11.25.2020 09:36 % Moisture:

Basis: Wet Weight Seq Number: 3143429

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 359 | 9.98 | mg/kg | 11.25.2020 12:03 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW14 Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-009 Date Collected: 11.24.2020 13:08 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 316 | 9.96 | mg/kg | 11.25.2020 12:08 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW15 Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-010 Date Collected: 11.24.2020 13:17 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 19.8 | 9.98 | mg/kg | 11.25.2020 12:13 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW16 Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-011 Date Collected: 11.24.2020 13:25 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 15.2 | 9.96 | mg/kg | 11.25.2020 12:19 | | 1 | _ |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW17 Matrix: Soil Date Received:11.24.2020 16:20

Lab Sample Id: 678998-012 Date Collected: 11.24.2020 13:33 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 452 | 9.90 | mg/kg | 11.25.2020 12:34 | | 1 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

^{**} Surrogate recovered outside laboratory control limit.

678998 **QC Summary**

WSP USA

Row 4 Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

E300P Prep Method:

Date Prep: 11.25.2020

E300P

Matrix: Solid Seq Number: 3143429 7715976-1-BLK LCS Sample Id: 7715976-1-BKS LCSD Sample Id: 7715976-1-BSD MB Sample Id:

LCS RPD MB Spike LCS LCSD Limits %RPD Units Analysis LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.00 250.0 242.8 97 239.3 96 90-110 20 11.25.2020 10:56 1 mg/kg

Analytical Method: Chloride by EPA 300

E300P Prep Method: Seq Number: 3143429 Matrix: Soil Date Prep: 11.25.2020 MS Sample Id: 678998-001 S MSD Sample Id: 678998-001 SD Parent Sample Id: 678998-001

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result 20 11.25.2020 11:11 Chloride 40.63 199.0 226.0 93 230.3 95 90-110 2 mg/kg

Analytical Method: Chloride by EPA 300

Prep Method: Seq Number: 3143429 Matrix: Soil Date Prep: 11.25.2020 MS Sample Id: 678998-011 S MSD Sample Id: 678998-011 SD Parent Sample Id: 678998-011

%RPD **RPD Parent** Spike MS MS Units Analysis MSD **MSD** Limits Flag **Parameter** Result Result %Rec Limit Date Amount Result %Rec 11.25.2020 12:24 Chloride 15.15 200.0 210.0 97 210.5 97 90-110 0 20 mg/kg

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / BRPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample A = Parent Result = MS/LCS Result E = MSD/LCSD Result

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

| 17 of 5. | MZC | 0 | | Houston | Chain of Custody Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio. | Cha 4200 Dallas, | JIN 0 | † Cus | Chain of Custody Dallas, TX (214) 902-0300 San Antonio. | TX (210) 509-3334 | 4 | | Work (| Work Order No: | | anhaha |
|---|--|--|-----------------|--|--|---|--|--|--|--|--|---|---------------------------------|--------------------------|--------------------------------|---|
| EA | BORATOR | ES | Hobb | Midlan os,NM (575-392 | nd,TX (432-704- 2-7550) Phoenii | 5440) EL Pa x,AZ (480-35 | aso,TX (91 55-0900) / | 5)585-3443 tlanta,GA (| Lubbock,7 | Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) | 13-620-2000 | 3 | www.xe | www.xenco.com | Page_ | - of 2 |
| Project Manager: | Dan Moir | | | | Bill to: (if different) | ant) Kyl | Kyle Littrell | | | | | | Wor | Work Order Comments | mments | |
| Company Name: | WSP USA | | | | Company Name: | | XTO Energy | | | | Progra | Program: UST/PST | | □RP □rownfields □RC | olds R | C S perfund |
| Address: | 3300 North A Street | treet | | | Address: | | 522 W. Mermod St | nod St. | | | Sta | State of Project: | | [| j | |
| City, State ZIP: | Midland, TX 79705 | 705 | | | City, State ZIP: | | Carlsbad, NM 88220 | M 88220 | | | Report | Reporting:Level II | evel III | II ST/UST | ST RP | ₹P L∯vel IV |
| Phone: | (432) 236-3849 | | | Email: | | om, dmoir@ | eltenv.com | n | | | Deliver | Deliverables: EDD | | ADaPT | | Other: |
| Project Name: | Now 4 | Wolverire | AR SWO | RISW Tu | Turn Around | | | | AN | ANALYSIS REQUEST | JEST | | | | Wor | Work Order Notes |
| Project Number: | TEO1343 COGI | 11200 | | Routine | ine A | | | | | | | | | | | |
| P.O. Number: | Spill duke | 41 | c/1/20 | Rush: | | | | | | | | _ | | | | |
| Sampler's Name: | | Jeremy Hill | | Due Date | Date: | | | 7_ | | | | _ | | | | |
| SAMPLE RECEIPT | | Temp Blank: | Yes No | Wet Ice: | No serv | | | nl | | | | | | | | |
| Temperature (°C): | 1.6/1. | ځ | 1 | Thermometer ID | D (| ners | |) e | | | | | | | | |
| Received Intact: | | No | L-W | CWM-00 | 120 | | _ | 300.0 | | | | | | | | |
| Sample Custody Seals: | ls: Yes No | | Tota | Total Containers: | 5 | | 1 | e (EPA | | | | | | | TAT starts lab, if r | TAT starts the day received by the lab, if received by 4:30pm |
| Sample Identification | tification | Matrix | Date Sampled | Time Sampled | Depth | Numbe | BTEX (| Chlorid | | | | | | | Samı | Sample Comments |
| Swol | | S | celhelin | 0957 | 0-31 | - | | X | | | | | | | Con | procedu |
| tons | | - | - | 1003 | 1 | - | | - | | | | | | | | + |
| Swos | | | | 1039 | | | | | | | | | | | | |
| Surble | | | | 1038 | 4 | | | | | | | | | | | |
| Sucs | | | | 1145 | 0-4' | | | | | | | | | | | |
| Surba | | | | (311 | - | | | | | | | | | | | |
| FINS | | _ | | 1218 | | | | | | | | | | | | |
| SW13 | | | | 1236 | | | | | | | | | | | | |
| 5W14 | | _ | _ | 1308 | | | | | | | | | | | | 1 |
| 13 Strate | SIMIS | 4 | * | 1317 | * | ~ | | 4 | | | | | | | | |
| Total 200.7 / 6010 Circle Method(s) a | otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed | 020: o be ana | ω | 8RCRA 13PPM TCLP/SPLP6 | RCRA 13PPM Texas 11 A | 1 Al Sb As CRA Sb As | As Ba As Ba I | Be B Cd Be Cd Cr | Ba Be B Cd Ca Cr Ba Be Cd Cr Co Cu | Co Cu Fe Pb Mg Mn Pb Mn Mo Ni Se Ag | b Mg Mn Ni Se Ag | Mo Ni | K Se Ag | SiO2 | Sr Tl Sn U V / 245.1 / 7470 | Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg |
| votice: 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 contract Xenco. A minimum charge 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. | nature 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 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 a minimum charge 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. | shment of a t of sample applied to e | samples consti | tutes a valid pur assume any res d a charge of \$5 | rchase order fron sponsibility for ar for each sample | n client comp ny losses or e submitted to | any to Xend expenses in Xenco, but | co, its affiliaticurred by the not analyze | es and subc e client if su d. These terr | ontractors. It assign ch losses are due t ns will be enforced | yns standard o circumstan unless previ | terms and co ces beyond t ously negotia | onditions he control ted. | | | |
| Relinquished by: (Signature) | (Signature) | > | Received I | Received by: (Signature) | re) | Date | Date/Time | | Relinquish | Relinquished by: (Signature) | ture) | Rece | ived by: | Received by: (Signature) | | Date/Time |
| my! | he | | lee (| 4 | | 8-72·1) | | 1622 | | | | | | | | |
| | | 3 | (| - | | | | 4 | | | | | | | | |
| on on | | | | | | | | o o | | | | | | | | |

Revised Date 051418 Rev. 2018.1

| | Pa | ge 248 of 52 |
|-------------|---------------|--------------|
| Company Nam | Project Manag | X |

Chain of Custody

Work Order No: 57898

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334

| Company Name Comp |
|--|
| |

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 11.24.2020 04.20.00 PM

Temperature Measuring device used: T_NM_007 Work Order #: 678998

| | Sample Receipt Checklist | | Comments |
|--|--------------------------|-----|----------|
| #1 *Temperature of cooler(s)? | | 1.4 | |
| #2 *Shipping container in good condition? | | Yes | |
| #3 *Samples received on ice? | | Yes | |
| #4 *Custody Seals intact on shipping contain | ner/ 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 relinquish | ned/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | abels/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 headsp | pace? | N/A | |

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

| Checklist completed by: | Cloe Clifton | Date: 11.24.2020 |
|-------------------------|----------------|------------------|
| Checklist reviewed by: | Jessica Vermer | Date: 11.25.2020 |

Jessica Kramer

PH Device/Lot#:

Analyst:

Certificate of Analysis Summary 679907 WSP USA, Dallas, TX

eurofins Environment Testing

Project Name: Row 4 Wolverine SWD Riser

Project Id:

Contact:

TE012920091

Dan Moir

Date Received in Lab: Fri 12.04.2020 16:30

Report Date: 12.08.2020 16:40

Project Location:

Project Manager: Jessica Kramer

| | Lab Id: | 679907-00 |)1 | 679907-00 |)2 | 679907-00 |)3 | 679907-0 | 04 | | |
|--------------------------------|-----------|------------------|------|------------------|------|------------------|------|------------------|------|--|--|
| Analysis Requested | Field Id: | SW19 | | SW20 | | SW21 | | SW22 | | | |
| Anaiysis Kequesieu | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | | |
| | Sampled: | 12.03.2020 13:03 | | 12.03.2020 13:12 | | 12.03.2020 13:22 | | 12.03.2020 13:31 | | | |
| Chloride by EPA 300 Extracted: | | 12.07.2020 16:17 | | 12.07.2020 16:17 | | 12.07.2020 16:17 | | 12.07.2020 16:17 | | | |
| | Analyzed: | 12.07.2020 17:28 | | 12.07.2020 17:45 | | 12.07.2020 17:50 | | 12.07.2020 17:56 | | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | | |
| Chloride | | 307 | 9.94 | 230 | 9.96 | 24.4 | 10.0 | 63.8 | 9.92 | | |

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 679907

for

WSP USA

Project Manager: Dan Moir

Row 4 Wolverine SWD Riser TE012920091 12.08.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



12.08.2020

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 679907

Row 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 679907. 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 Eurofins Xenco, LLC. 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. 679907 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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



Sample Cross Reference 679907

WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW19 | S | 12.03.2020 13:03 | 0 - 4 ft | 679907-001 |
| SW20 | S | 12.03.2020 13:12 | 0 - 4 ft | 679907-002 |
| SW21 | S | 12.03.2020 13:22 | 0 - 4 ft | 679907-003 |
| SW22 | S | 12.03.2020 13:31 | 0 - 4 ft | 679907-004 |

Page 254 of 520

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA

Project Name: Row 4 Wolverine SWD Riser

 Project ID:
 TE012920091
 Report Date:
 12.08.2020

 Work Order Number(s):
 679907
 Date Received:
 12.04.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW19 Matrix: Soil Date Received:12.04.2020 16:30

Lab Sample Id: 679907-001 Date Collected: 12.03.2020 13:03 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 307 | 9.94 | mg/kg | 12.07.2020 17:28 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW20 Matrix: Soil Date Received:12.04.2020 16:30

Lab Sample Id: 679907-002 Date Collected: 12.03.2020 13:12 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 230 | 9.96 | mg/kg | 12.07.2020 17:45 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW21 Matrix: Soil Date Received:12.04.2020 16:30

Lab Sample Id: 679907-003 Date Collected: 12.03.2020 13:22 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 24.4 | 10.0 | mg/kg | 12.07.2020 17:50 | | 1 | _ |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW22 Matrix: Soil Date Received:12.04.2020 16:30

Lab Sample Id: 679907-004 Date Collected: 12.03.2020 13:31 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 63.8 | 9.92 | mg/kg | 12.07.2020 17:56 | | 1 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

Final 1.000

^{**} Surrogate recovered outside laboratory control limit.

679907 **QC Summary**

WSP USA

Row 4 Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

E300P Prep Method:

Date Prep: Seq Number: 3144164 Matrix: Solid 12.07.2020 7716603-1-BLK LCS Sample Id: 7716603-1-BKS MB Sample Id:

LCSD Sample Id: 7716603-1-BSD RPD %RPD Units Analysis

E300P

LCS MB Spike LCS LCSD Limits LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 244 98 98 90-110 0 20 12.07.2020 17:17 245 mg/kg

Analytical Method: Chloride by EPA 300

Seq Number:

Parent Sample Id:

E300P Prep Method: 3144164 Matrix: Soil Date Prep: 12.07.2020 MS Sample Id: 679907-001 S MSD Sample Id: 679907-001 SD 679907-001

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec Result %Rec Limit Date

20 12.07.2020 17:34 Chloride 307 200 497 95 487 90 90-110 2 mg/kg

Analytical Method: Chloride by EPA 300

Prep Method: Seq Number: 3144164 Matrix: Soil Date Prep: 12.07.2020

MS Sample Id: 679909-007 S MSD Sample Id: 679909-007 SD Parent Sample Id: 679909-007

%RPD **RPD** Spike MS MS Units **Parent** MSD **MSD** Limits Analysis Flag **Parameter** Result Result %Rec Limit Date Amount %Rec Result 12.07.2020 18:52 Chloride <10.0 201 205 102 201 90-110 2 20 mg/kg 100

| Project Manager: | X |
|------------------|------|
| Dan Moir | MNCO |

WSP USA

Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334

Midland, TX 79705 3300 North A Street Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) City, State ZIP: Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 Address: Company Name: Bill to: (if different) deninations on Mar & wsp. com Carlsbad, NM 88220 522 W. Mermod St. XTO Energy Kyle Littrell Reporting:Level III ___\$T/UST ___RP | [\$vel IV ___ Program: UST/PST State of Project: Work Order No: 67 9907 www.xenco.com □RP □rownfields Work Order Comments Page

RC

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of

| | | 4 | |
|---------------------------------|--|---|--|
| Date/Time | Received by: (Signature) | 630 | The Cled Chillers 12 |
| | Booking | Date/Time Relinquished by: (Signature) | Received by: (Signature) |
| | rd terms and conditions ances beyond the control viously negotiated. | ses or expenses incurred by the client if such losses are due to circumst itted to Xenco, but not analyzed. These terms will be enforced unless pro | co. A minimum charge 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. |
| 1631 / 245.1 / 7470 / 7471 : Hg | | Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se And subcontraction of the Company to Xenco, its affiliates and subcontraction. | Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontact. |
| 2 | Mn Mo Ni K Se An SiO2 Na St Ti | I Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg | otal 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba |
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| | | | Swar 4 4 1331 & |
| | | | 1337 |
| Composit | | | 1317 |
| | | 5 (| 3612 5 18/8/60 1303 0-41 1 |
| Sample Comments | w | TPH BTE | Sampled Sampled Depth |
| lab, if received by 4:30pm | <u> </u> | (EPA X (EP) | Time |
| torte the day seemed to | TAT | 801: A 0= | No N/A Total Containers: |
| | | 5) 8021 | N/A Correction Factor: |
| | | V | 1-00 MODE |
| | | | Thermometer ID |
| | | ~~~ | SAMPLE RECEIPT Temp Blank: Yes No Wet Ice: Yes No |
| | | 20 | ampler's Name: Jeremy Hill Due Date: |
| | | | 1/30 |
| Work Order Notes | | ANALYSIS REQUEST | Ro |
| Orner: | | L | roject Name: New 4 Walverne Swo Riser Turn Around |
| | | Email: Thill@itenv.com, dmoir@itenv.com | (432) 230-3649 |
| IRP Libvel IV | reporting. Level III 51/UST | | |

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 12.04.2020 04.30.00 PM Air and Metal samples Acceptable Range: Ambient

Work Order #: 679907 Temperature Measuring device used : T_NM_007

| | Sample Receipt Checklist | | Comments |
|---|--------------------------|-----|--------------------------------------|
| #1 *Temperature of cooler(s)? | | .8 | |
| #2 *Shipping container in good condition? | | Yes | |
| #3 *Samples received on ice? | | Yes | |
| #4 *Custody Seals intact on shipping contain | er/ 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 | ed/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | bels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers. |
| #13 Samples properly preserved? | | Yes | |
| #14 Sample container(s) intact? | | Yes | |
| #15 Sufficient sample amount for indicated to | est(s)? | Yes | |
| #16 All samples received within hold time? | | Yes | |
| #17 Subcontract of sample(s)? | | No | |
| #18 Water VOC samples have zero headspa | ice? | N/A | |

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

Checklist completed by:

Cloe Clifton

Checklist reviewed by:

Date: 12.04.2020

Date: 12.07.2020

Date: 12.07.2020

PH Device/Lot#:

Analyst:

eurofins Environment Testing

Certificate of Analysis Summary 679909 WSP USA, Dallas, TX

Project Name: Row 4 Wolverine SWD Riser

Project Id:

Project Location:

TE012920091

Date Received in Lab: Fri 12.04.2020 16:30

Contact:

Dan Moir

Report Date: 12.08.2020 16:39

Project Manager: Jessica Kramer

| | Lab Id: | 679909-0 | 01 | 679909-00 | 02 | 679909-003 | | 679909-004 | | 679909-005 | | 679909-00 | 06 | |
|---------------------|------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|
| Analysis Requested | Field Id: | SW25 | | SW26 | | SW27 | | SW30 | | SW31 | | SW34 | | |
| 7matysis Requested | Depth: | 0-4 ft | | |
| | Matrix: | SOIL | | |
| | Sampled: | 12.04.2020 10:14 | | 12.04.2020 10:20 | | 12.04.2020 10:29 | | 12.04.2020 11:49 | | 12.04.2020 12:00 | | 12.04.2020 12:53 | | |
| Chloride by EPA 300 | Extracted: | 12.07.2020 | 12.07.2020 16:17 | | 12.07.2020 16:17 | | 12.07.2020 16:17 | | 12.07.2020 16:17 | | 12.07.2020 16:17 | | 12.07.2020 16:17 | |
| | Analyzed: | 12.07.2020 18:01 | | 12.07.2020 18:18 | | 12.07.2020 18:24 | | 12.07.2020 18:29 | | 12.07.2020 18:35 | | 12.07.2020 18:41 | | |
| | Units/RL: | mg/kg | RL | |
| Chloride | | 3990 | 50.3 | 6960 | 50.5 | 8130 | 50.1 | 543 | 9.96 | 390 | 10.0 | 204 | 10.0 | |

BRL - Below Reporting Limit

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

Jessica Weamer

Certificate of Analysis Summary 679909 WSP USA, Dallas, TX

eurofins Environment Testing

Project Name: Row 4 Wolverine SWD Riser

Project Id:

Contact:

TE012920091

Dan Moir

Date Received in Lab: Fri 12.04.2020 16:30

Report Date: 12.08.2020 16:39

Project Location:

Project Manager: Jessica Kramer

| | Lab Id: | 679909-00 |)7 | 679909-0 | 08 | 679909-00 |)9 | | |
|---------------------|------------|------------------|------------------|------------------|------------------|------------------|------|--|--|
| Analysis Requested | Field Id: | SW35 | | SW38 | | SW39 | | | |
| Anatysis Requested | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | | |
| | Matrix: | | | SOIL | | SOIL | | | |
| | Sampled: | 12.04.2020 13:01 | | 12.04.2020 14:09 | | 12.04.2020 14:21 | | | |
| Chloride by EPA 300 | Extracted: | 12.07.2020 1 | 12.07.2020 16:17 | | 12.07.2020 16:17 | | 6:17 | | |
| | Analyzed: | 12.07.2020 1 | 12.07.2020 18:46 | | 12.07.2020 19:03 | | 9:08 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | | |
| Chloride | | <9.98 | 9.98 | 380 | 9.98 | 18.6 | 10.0 | | |

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 679909

for

WSP USA

Project Manager: Dan Moir

Row 4 Wolverine SWD Riser TE012920091 12.08.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



12.08.2020

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 679909

Row 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 679909. 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 Eurofins Xenco, LLC. 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. 679909 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 679909

WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW25 | S | 12.04.2020 10:14 | 0 - 4 ft | 679909-001 |
| SW26 | S | 12.04.2020 10:20 | 0 - 4 ft | 679909-002 |
| SW27 | S | 12.04.2020 10:29 | 0 - 4 ft | 679909-003 |
| SW30 | S | 12.04.2020 11:49 | 0 - 4 ft | 679909-004 |
| SW31 | S | 12.04.2020 12:00 | 0 - 4 ft | 679909-005 |
| SW34 | S | 12.04.2020 12:53 | 0 - 4 ft | 679909-006 |
| SW35 | S | 12.04.2020 13:01 | 0 - 4 ft | 679909-007 |
| SW38 | S | 12.04.2020 14:09 | 0 - 4 ft | 679909-008 |
| SW39 | S | 12.04.2020 14:21 | 0 - 4 ft | 679909-009 |

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CASE NARRATIVE

💸 eurofins **Environment Testing** Xenco

Client Name: WSP USA

Project Name: Row 4 Wolverine SWD Riser

Project ID: Report Date: 12.08.2020 TE012920091 Work Order Number(s): 679909 Date Received: 12.04.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW25 Matrix: Soil Date Received:12.04.2020 16:30

Lab Sample Id: 679909-001 Date Collected: 12.04.2020 10:14 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 3990 | 50.3 | mg/kg | 12.07.2020 18:01 | | 5 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW26 Matrix: Soil Date Received:12.04.2020 16:30

Lab Sample Id: 679909-002 Date Collected: 12.04.2020 10:20 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 6960 | 50.5 | mg/kg | 12.07.2020 18:18 | | 5 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW27 Matrix: Soil Date Received:12.04.2020 16:30

Lab Sample Id: 679909-003 Date Collected: 12.04.2020 10:29 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 8130 | 50.1 | mg/kg | 12.07.2020 18:24 | | 5 | _ |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW30 Matrix: Soil Date Received: 12.04.2020 16:30

Lab Sample Id: 679909-004 Date Collected: 12.04.2020 11:49 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 543 | 9.96 | mg/kg | 12.07.2020 18:29 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW31 Matrix: Soil Date Received:12.04.2020 16:30

Lab Sample Id: 679909-005 Date Collected: 12.04.2020 12:00 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 390 | 10.0 | mg/kg | 12.07.2020 18:35 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW34 Matrix: Soil Date Received: 12.04.2020 16:30

Lab Sample Id: 679909-006 Date Collected: 12.04.2020 12:53 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 204 | 10.0 | mg/kg | 12.07.2020 18:41 | | 1 |

Date Received:12.04.2020 16:30



Certificate of Analytical Results 679909

WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: Matrix: Soil

Lab Sample Id: 679909-007 Date Collected: 12.04.2020 13:01 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

SW35

% Moisture: MAB Analyst: Date Prep: 12.07.2020 16:17 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | <9.98 | 9.98 | mg/kg | 12.07.2020 18:46 | U | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW38 Matrix: Soil Date Received:12.04.2020 16:30

Lab Sample Id: 679909-008 Date Collected: 12.04.2020 14:09 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 380 | 9.98 | mg/kg | 12.07.2020 19:03 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW39 Matrix: Soil Date Received:12.04.2020 16:30

Lab Sample Id: 679909-009 Date Collected: 12.04.2020 14:21 Sample Depth: 0 - 4 ft

Prep Method: E300P

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3144164

Date Prep: 12.07.2020 16:17

% Moisture:

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 18.6 | 10.0 | mg/kg | 12.07.2020 19:08 | | 1 |



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. **ND** Not Detected.

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

679909 **QC Summary**

WSP USA

Row 4 Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

E300P Prep Method:

Date Prep: 12.07.2020

E300P

Seq Number: 3144164 Matrix: Solid MB Sample Id: 7716603-1-BLK LCS Sample Id: 7716603-1-BKS LCSD Sample Id: 7716603-1-BSD

LCS RPD MB Spike LCS LCSD Limits %RPD Units Analysis LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 244 98 98 90-110 0 20 12.07.2020 17:17 245 mg/kg

Analytical Method: Chloride by EPA 300

E300P Prep Method: 3144164 Seq Number: Matrix: Soil Date Prep: 12.07.2020 MS Sample Id: 679907-001 S MSD Sample Id: 679907-001 SD Parent Sample Id: 679907-001

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec Result %Rec Limit Date 20 12.07.2020 17:34 Chloride 307 200 497 95 487 90 90-110 2 mg/kg

Analytical Method: Chloride by EPA 300

Prep Method: Seq Number: 3144164 Matrix: Soil Date Prep: 12.07.2020 MS Sample Id: 679909-007 S MSD Sample Id: 679909-007 SD Parent Sample Id: 679909-007

%RPD **RPD Parent** Spike MS MS Units MSD **MSD** Limits Analysis Flag **Parameter** Result Result %Rec Limit Date Amount Result %Rec 12.07.2020 18:52 Chloride <10.0 201 205 102 201 90-110 2 20 mg/kg 100

| - | | | |
|-------|-----|---------------------------|-----|
| _Page | 280 | nt | 520 |
| 7 "8" | 200 | $\mathbf{v}_{\mathbf{J}}$ | 020 |

Chain of Custody

Work Order No: 67909

| Revised Date 051418 Rev. 2 | | 6 | | | | | 1 ω |
|-----------------------------------|---|---|---|--|-------------------------|--|--|
| | | 4 | (E9) 07.L.71 | with | Close | m | Par |
| | | 2 | 12 11 20 h | | | Relinquisited by. (Signature) | Relinquisiled |
| ature) Date/Time | Received by: (Signature) | Relinquished by: (Signature) | Date/Time | Received by: (Signature) | Received | by: (Signature) | or version of |
| 1 | eviously negotiated. | alyzed. These terms will be enforced unless pre | . Xenco will be liable only for the cost of samples and shall not assume only corporation of sample submitted to Xenco, but not analyzed. These terms with a minimum charge 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 with a minimum charge 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 with a charge of \$6 for each sample submitted to Xenco, but not analyzed. These terms with a charge 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 with a charge of \$6 for each sample submitted to Xenco, but not analyzed. These terms with a charge of \$6 for each sample submitted to Xenco, but not analyzed. | d a charge of \$5 for each sample | lied to each project an | be liable only for the cost of charge of \$75.00 will be app | of service. Xenco will |
| | rd terms and conditions tances beyond the control | 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 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 | m client company to Xenco, its a | tutes a valid purchase order from | nent of samples consti | is document and relinquish | Notice: Signature of th |
| 12 | | d Cr Co Cu Pb Mn Mo Ni Se Ag Tl L | Texas 11 Al Sb As Ba Be B 10: 8RCRA Sb As Ba Be Cd | 8RCRA 13PPM Texas 11 A TCLP / SPLP 6010: 8RCRA | e analyzed 8F | otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed | Total 200.7 / 6010 Circle Method(s) a |
| Na Sr TI Sn U V Zn | n Mo Ni K Se Ag SiO2 Na | 2 6 6 6 | | | | | |
| | | | 2 | 1431 | 4 | A | 5w39 |
| * | | | | 1409 | | 38 | SU 3 |
| | | | | 1301 | | 35 | |
| | | | | 1153 | | 34 | 5 43 |
| | | | | 1300 | | 1 | Sw31 |
| | | | | 1149 | | G. | 5w 30 |
| | | | | 1601 | | 2 | Ce 25 |
| | | | | 1630 | | | Sw ale |
| | | | - 2 | 1014 O-4. | STH CI | 5 | Swas |
| Carpenta | | | тр | 1 | Sampled | | Sample Identification |
| Sample Comments | | | H (EF | Time Depth | Dat | _ | Sample Sacred S |
| | | | PA 8 | Total Containers: | N/A Total (| Yes No | Sample Custody Seals: |
| lab, if received by 4:30pm | | | 0=6 | Correction Factor: 40 . C | N/A Correct | Yes (No. | Cooler Custody Seals: |
| TAT starts the day received by th | | | 8021 | 100-100 + | 1.10 | CY) No | Received Intact: |
| | | |) | Thermometer ID | | 10/00 | Temperature (°C): |
| | | | On le | Wet Ice: Yes No | ank: Yes) No | IPT Temp Blank: | SAMPLE RECEIPT |
| | | | | Due Date: | Jeremy Hill | | Sampler's Name: |
| | | | | Rush: | 6/01/30 | Spill Ode " | O. Number: |
| | | | | Routine P | 13 | 512 | roject Number: |
| | | ANALYSIS REGUES! | | Turn Around | me Swith Ruser | Roy 4 Walvern | roject Name: |
| Work Order Notes | | | dition@itenv.com | Email: Linux@Henv:com, | | (432) 236-3849 | hone: |
| PT Other: | Deliverables: EDD ADaPT | mar ousp. com | i @ wso, con | Tornan . H | | Midiand, IA 19105 | City, State ZIP: |
| | Reporting:Level II Level III Level III | Reporti | Carlsbad, NM 88220 | City, State ZIP: | | 2000 TO 70705 | address. |
| 3 | 1 | Stat | 522 W. Mermod St. | Address: | | 3300 North A Street | Joinpany Ivanic. |
| nitelds KC periund | Program: UST/PST □RP □rownfields | Prograi | e: XTO Energy | Company Name: | | WSPUSA | Opcor Mame: |
| - In | | | Kyle Littrell | Bill to: (if different) | | Dan Moir | roject Manager |
| - ago | WW | Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) | Z (480-355-0900) Atlanta,GA | M (575-392-7550) Phoenix,A | Hobbs,N | OCKA-OX-OO | I LA |
| Page of | | Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 | 40) EL Paso, TX (915)585-344 | Midland, TX (432-704-544 | | | X |
| | | Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio, IX (210) 509-5354 | 00 Dallas,TX (214) 902-0300 | Houston, TX (281) 240-420 | | | 1 |

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 12.04.2020 04.30.00 PM

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Work Order #: 679909 Temperature Measuring device used : T_NM_007

| | Sample Receipt Checklist | | Comments |
|--|--------------------------|-----|--------------------------------------|
| #1 *Temperature of cooler(s)? | | .8 | |
| #2 *Shipping container in good condition? | | Yes | |
| #3 *Samples received on ice? | | Yes | |
| #4 *Custody Seals intact on shipping contain | ner/ 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 relinquish | ned/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | abels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers. |
| #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 headsp | pace? | N/A | |

| * Must be | completed for | after-hours | delivery of | samples | prior to | placing in | the i | refrigerato | 16 |
|-----------|---------------|-------------|-------------|---------|----------|------------|-------|-------------|----|
| | | | | | | | | | |

| Checklist completed by: | Cloe Clifton | Date: <u>12.04.2020</u> |
|-------------------------|--------------------------------|-------------------------|
| Checklist reviewed by: | Jessica Warmer Jessica Kramer | Date: <u>12.07.2020</u> |

PH Device/Lot#:

Analyst:

eurofins Environment Testing

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Certificate of Analysis Summary 680289

LT Environmental, Inc., Arvada, CO

Project Name: Row 4 Wolverine SWD Riser

Project Id: Contact:

Project Location:

TE012920091

Dan Moir

Date Received in Lab: Tue 12.08.2020 16:47

Report Date: 12.10.2020 13:20

Project Manager: Jessica Kramer

| | Lab Id: | 680289-0 | 680289-001 | | 680289-002 | | 680289-003 | | 680289-004 | | 680289-005 | |)6 |
|---------------------|------------|------------------|------------|--------------------|------------|------------------|------------|------------------|------------|------------------|------------|------------------|------|
| Analysis Requested | Field Id: | SW51 | | SW55 | | SW56 | | SW57 | | SW58 | | SW59 | |
| | Depth: | 0-4 ft | | 0-3 ft | | 0-4 ft | | 0-4 ft | | 0-3 ft | | 0-3 ft | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | Sampled: | 12.08.2020 11:09 | | 12.08.2020 11:40 1 | | 12.08.2020 11:50 | | 12.08.2020 11:55 | | 12.08.2020 13:03 | | 12.08.2020 13:10 | |
| Chloride by EPA 300 | Extracted: | 12.09.2020 11:12 | | 12.09.2020 11:12 | | 12.09.2020 | 11:12 | 12.09.2020 11:12 | | 12.09.2020 11:12 | | 12.09.2020 11:12 | |
| | Analyzed: | 12.09.2020 11:58 | | 12.09.2020 12:14 | | 12.09.2020 12:20 | | 12.09.2020 12:26 | | 12.09.2020 12:31 | | 12.09.2020 12:4 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 130 | 9.92 | 407 | 9.98 | 20.1 | 0.893 | 104 | 9.98 | <10.1 | 10.1 | <10.1 | 10.1 |

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 680289

for

LT Environmental, Inc.

Project Manager: Dan Moir

Row 4 Wolverine SWD Riser TE012920091 12.10.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



12.10.2020

Project Manager: **Dan Moir LT Environmental, Inc.**4600 W. 60th Avenue
Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 680289

Row 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 680289. 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 Eurofins Xenco, LLC. 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. 680289 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 680289

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW51 | S | 12.08.2020 11:09 | 0 - 4 ft | 680289-001 |
| SW55 | S | 12.08.2020 11:40 | 0 - 3 ft | 680289-002 |
| SW56 | S | 12.08.2020 11:50 | 0 - 4 ft | 680289-003 |
| SW57 | S | 12.08.2020 11:55 | 0 - 4 ft | 680289-004 |
| SW58 | S | 12.08.2020 13:03 | 0 - 3 ft | 680289-005 |
| SW59 | S | 12.08.2020 13:10 | 0 - 3 ft | 680289-006 |

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CASE NARRATIVE

eurofins **Environment Testing** Xenco

Client Name: LT Environmental, Inc. Project Name: Row 4 Wolverine SWD Riser

Project ID: Report Date: 12.10.2020 TE012920091 Work Order Number(s): 680289 Date Received: 12.08.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW51 Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680289-001 Date Collected: 12.08.2020 11:09 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 130 | 9.92 | mg/kg | 12.09.2020 11:58 | | 1 | _ |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680289-002 Date Collected: 12.08.2020 11:40 Sample Depth: 0 - 3 ft

Date Prep:

Prep Method: E300P

Analytical Method: Chloride by EPA 300

SW55

Tech: MAB

Sample Id:

% Moisture: 12.09.2020 11:12

MAB Analyst:

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|----------------------|------|-----|
| Chloride | 16887-00-6 | 407 | 9.98 | mg/kg | 12.09.2020 12:14 | | 1 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: **SW56** Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680289-003 Date Collected: 12.08.2020 11:50 Sample Depth: 0 - 4 ft

Prep Method: E300P

Analytical Method: Chloride by EPA 300

Tech: MAB MAB Analyst:

% Moisture: Date Prep: 12.09.2020 11:12 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|-------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 20.1 | 0.893 | mg/kg | 12.09.2020 12:20 | | 1 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW57 Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680289-004 Date Collected: 12.08.2020 11:55 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.09.2020 11:12 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 104 | 9.98 | mg/kg | 12.09.2020 12:26 | | 1 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW58 Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680289-005 Date Collected: 12.08.2020 13:03 Sample Depth: 0 - 3 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.09.2020 11:12 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | <10.1 | 10.1 | mg/kg | 12.09.2020 12:31 | U | 1 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW59 Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680289-006 Date Collected: 12.08.2020 13:10 Sample Depth: 0 - 3 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | <10.1 | 10.1 | mg/kg | 12.09.2020 12:48 | U | 1 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

^{**} Surrogate recovered outside laboratory control limit.

Flag

Xenco

Parameter

Parent Sample Id:

QC Summary 680289

LT Environmental, Inc.

Row 4 Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

Environment Testing

Seq Number: 3144392

Matrix: Solid 7716778-1-BLK LCS Sample Id: 7716778-1-BKS

E300P Prep Method:

Date Prep: 12.09.2020

LCSD Sample Id: 7716778-1-BSD MB Sample Id: LCS RPD MB Spike LCS LCSD Limits %RPD Units Analysis LCSD

Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 243 97 98 90-110 0 20 12.09.2020 11:46 244 mg/kg

Analytical Method: Chloride by EPA 300

3144392 Seq Number: Matrix: Soil

MS Sample Id: 680289-001 S 680289-001

Date Prep: 12.09.2020 MSD Sample Id: 680289-001 SD

Prep Method:

E300P

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result

20 12.09.2020 12:03 Chloride 130 199 330 101 331 101 90-110 0 mg/kg

Analytical Method: Chloride by EPA 300

E300P Prep Method: 3144392 Seq Number: Matrix: Soil Date Prep: 12.09.2020

680291-005 S MS Sample Id: MSD Sample Id: 680291-005 SD Parent Sample Id: 680291-005

%RPD **RPD Parent** Spike MS MS Units Analysis MSD **MSD** Limits Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec

12.09.2020 13:21 Chloride <10.1 201 202 100 204 90-110 20 101 1 mg/kg

O

Revised Date 051418 Rev. 2018.1



Chain of Custody

Work Order No: (250789)

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,N | M (575-392-7550) Phoenix,AZ (| Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) | 13-620-2000) www.xenco.com Page 1 | of |
|---------------------------|--|-------------------------------|---|--|----------|
| Project Manager: Dan Moir | Dan Moir | Bill to: (if different) | Kyle Littrell | Work Order Comments | |
| Company Name: | Company Name: LT Environmental, Inc., Permian office | Company Name: XTO Energy | XTO Energy | Program: UST/PST TRP Trownfields TRC STreeting | nerfund |
| Address: | 3300 North A Street | Address: | | State of Project: | |
| City, State ZIP: | Midland, Tx 79705 | City, State ZIP: | | Reporting:Level III | Ubvel IV |
| Phone: | (432) 236-3849 | Email: Jeremy.Hill@wsp.c | Email: Jeremy.Hill@wsp.com Tacoma Morrissev@wsp.com | Deliverables: EDD ADaPT Other: | |
| | | | | 1 | |

| W sorry | Relinquished by: (S | votice: 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 Xenco. A minimum charge of \$75.00 fill be applied to each project and a charge of \$5.00 file ach sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated. | Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed | | | SW59 | SW58 | SW57 | SW56 | SW55 | SW51 | Sample Identification | Sample Custody Seals: | Cooler Custody Seals: | Cecles Contact: | l'emperature (°C): | | SAMPLE RECEIPT | Sampler's Name: | P.O. Number: | Project Number: | Project Name: |
|----------------|--------------------------|--|---|---|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------------------|----------------------------|------------------------------------|-----------------|--------------------|------------|-----------------|-----------------|-----------------------|-----------------|---------------------------|
| | (Signature) | ment and relinquish e only for the cost o of \$75.00 fill be ap | 200.8 / 6020: and Metal(s) to be | | | | | | | | | | Yes (No) | 4 | 00 | E/0/3 | | | Je | Spill Da | TE | Row 4 Wo |
| ¥ | - | iment of samples plied to ea | te anal | | | S | S | S | S | | S | Matrix | NA | NA | No | i cu |) Cidilly. | Temp Blank | Jeremy Hill | Spill Date 06-01-2020 | TE012920091 | lverine : |
| 4 4 | ecei/red/by | amples constitu and shall not as ch project and a | yzed To | | | 12/8/2020 | 12/8/2020 | 12/8/2020 | 12/8/2020 | 12/8/2020 | 12/8/2020 | Date Sampled | Total (| Correc | 1-1 | 1 7 | | No. | | 1-2020 | 091 | Row 4 Wolverine SWD Riser |
| | led by: (Signature) | tes a valid p ssume any r a charge of s | 8RCRA 13 | | | 13:10 | 13:03 | 11:55 | 11:50 | 11:40 | 11:09 | Time Sampled | Total Containers: | Correction Factor: | 100-MIN | Thermometer ID | AAGLICA | Wetle | Due | Rush: | Rou | |
| | | urchase order from client company to Xenco, its affiliates and subcontra- esponsibility for any losses or expenses incurred by the client if such los by ar each sample submitted to Xenco, but not analyzed. These terms wil | RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb | | | 0-3 | 0-3 | 0-4 | 0-4 | 0-3 | 0-4 | Depth | 5 | 2.0.2 | 100 | er ID | STATES NO | Wet Ica: Vac No | Due Date: | sh: | Routine 1 | Turn Around |
| 3000 HOC 19151 | 0 | m client co any losses e submitted | 11 Al Sb CRA Sb | | | _ | _ | -1 | _ | _ | _ | Numbe | er of | C | onta | ine | rs | | | | | 1 |
| 264 | Date/Time | or expense to Xenco, | Sb As B | | | + | | | - | - | | TPH (EF | | | \ . | | | _ | | | | |
| 000 | е | Xenco, its and incurred but not an | As Ba Be I | | | × | × | × | × | × | × | Chloride | | | | | ł | | | | | |
| 2 | 100 | affiliates ar by the clic alyzed. Th | B Cd Ca Cd Cr Co | | | | | | | | | | | | | | | | | | | |
| J. | Relinquished | nd subcont ent if such ese terms | a Cr Co o Cu Pb | | + | | | | | | | | | | _ | | | | | | | ANALY |
| 1 | Ye | tractors. It losses are will be enfo | o Cu Fe b Mn Mc | | | i | | | | | | | | | | | | | | | | LYSIS F |
| | Signature) | assigns st due to circ orced unic | Mo Ni S | | | | | | | | | | | | | | | | | | | SIS REQUEST |
| - | | tandard te cupstance s previou | Cu Fe Pb Mg Mn Mo Mn Mo Ni Se Ag Tl U | | | | | | | | | | | | | | | _ | | | | 15 |
| (4 | Rec | ctors. It assigns standard terms and condi sees are due to circumstances beyond the c Il be enforced units previously negotiated | Mo Ni | | | | | | | | | | - | | - | | | | | _ | | |
| me () | Received by: (Signature) | onditions the control ated. | K Se A | | | | | | | | | | | | | | | | | | | |
| A STATE | /: (Signa | | g SiO2 | 1 | - | | | | | | | | | | | | | | | | | |
| 7 | ature) | | Na Sr 1631/2 | | | | | | | | | | - | TA | | | | | | _ | | |
| 7. | | | TI Sn 345.1/7 | | | CO | co | co | co | CO | CO | Sampl | lab, if rev | T starts th | | | | | | | | Work |
| 28-20 1647 | Date/Time | | Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn Ni Se Ag Tl U 1631/245.1/7470/7471:Hg | | | COMPOSITE | COMPOSITE | COMPOSITE | COMPOSITE | COMPOSITE | COMPOSITE | Sample Comments | lab, if received by 4:30pm | TAT starts the day received by the | | | | | | | | Work Order Notes |
| | | naging: | 71 : Hg | | | | ın | iù | ıΠ | т | m) | ents | :30pm | ind hu tho | | | | | | | | otes |

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 12.08.2020 04.47.00 PM

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

Work Order #: 680289

Analyst:

Temperature Measuring device used: T_NM_007

| | Sample Receipt Checklist | | Comments |
|---|--------------------------|-----|--------------------------------------|
| #1 *Temperature of cooler(s)? | | 3.8 | |
| #2 *Shipping container in good condition? | | Yes | |
| #3 *Samples received on ice? | | Yes | |
| #4 *Custody Seals intact on shipping contai | ner/ 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 relinquish | ned/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | abels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers. |
| #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 headsp | ace? | N/A | |

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

| Checklist completed by: | Cloe Clifton | Date: <u>12.08.2020</u> | |
|-------------------------|----------------|-------------------------|--|
| Checklist reviewed by: | Jessica Vramer | Data: 12.09.2020 | |

Jessica Kramer

PH Device/Lot#:

eurofins Environment Testing

Certificate of Analysis Summary 680291 WSP USA, Dallas, TX

Project Name: Row 4 Wolverine SWD Riser

Project Id:

TE012920091

Date Received in Lab: Tue 12.08.2020 16:47

Dan Moir **Contact:**

Report Date: 12.14.2020 14:12

Project Location:

Project Manager: Jessica Kramer

| | Lab Id: | 680291-0 | 01 | 680291-00 |)2 | 680291-00 |)3 | 680291-0 | 04 | 680291-0 | 05 | 680291-00 |)6 |
|---------------------|------------|------------|------------------|--------------|------|--------------|------|------------|-------|------------|-------|--------------|------|
| Analysis Requested | Field Id: | SW40 | | SW43 | | SW44 | | SW45 | | SW46 | | SW47 | |
| Analysis Requesieu | Depth: | 0-4 ft | | 0-4 ft | | 0-3 ft | | 0-3 ft | | 0-4 ft | | 0-4 ft | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | Sampled: | 12.08.2020 | 12.08.2020 10:51 | | 1:15 | 12.08.2020 1 | 1:22 | 12.08.2020 | 11:29 | 12.08.2020 | 11:38 | 12.08.2020 1 | 1:46 |
| Chloride by EPA 300 | Extracted: | 12.09.2020 | 11:12 | 12.09.2020 1 | 1:12 | 12.09.2020 1 | 1:12 | 12.09.2020 | 11:12 | 12.09.2020 | 11:12 | 12.09.2020 1 | 1:12 |
| | Analyzed: | 12.09.2020 | 12:53 | 12.09.2020 1 | 2:59 | 12.09.2020 1 | 3:05 | 12.09.2020 | 13:10 | 12.09.2020 | 13:16 | 12.09.2020 1 | 3:32 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 79.7 | 9.98 | <10.0 | 10.0 | <10.1 | 10.1 | 191 | 10.0 | <10.0 | 10.0 | <10.0 | 10.0 |

BRL - Below Reporting Limit

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

Jessica Vramer

TE012920091

Dan Moir

Page 298 of 520

Certificate of Analysis Summary 680291 WSP USA, Dallas, TX

eurofins
Environment Testing

Project Id:

Contact:

vibi ebri, Danas, i

Project Name: Row 4 Wolverine SWD Riser

Date Received in Lab: Tue 12.08.2020 16:47

Report Date: 12.14.2020 14:12

Project Location: Project Manager: Jessica Kramer

| | Lab Id: | 680291-007 | 7 | 680291-0 | 08 | | |
|---------------------|------------|---------------|------|------------|-------|--|--|
| Analysis Requested | Field Id: | SW48 | | SW49 | | | |
| Anatysis Requested | Depth: | 0-4 ft | | 0-4 ft | | | |
| | Matrix: | SOIL | | SOIL | | | |
| | Sampled: | 12.08.2020 11 | 1:55 | 12.08.2020 | 12:04 | | |
| Chloride by EPA 300 | Extracted: | 12.09.2020 11 | 1:12 | 12.09.2020 | 11:12 | | |
| | Analyzed: | 12.09.2020 13 | 3:38 | 12.09.2020 | 13:55 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | | |
| Chloride | | 638 | 9.98 | 3330 | 50.3 | | |

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 680291

for

WSP USA

Project Manager: Dan Moir

Row 4 Wolverine SWD Riser TE012920091 12.14.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



12.14.2020

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 680291

Row 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 680291. 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 Eurofins Xenco, LLC. 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. 680291 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 680291

WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW40 | S | 12.08.2020 10:51 | 0 - 4 ft | 680291-001 |
| SW43 | S | 12.08.2020 11:15 | 0 - 4 ft | 680291-002 |
| SW44 | S | 12.08.2020 11:22 | 0 - 3 ft | 680291-003 |
| SW45 | S | 12.08.2020 11:29 | 0 - 3 ft | 680291-004 |
| SW46 | S | 12.08.2020 11:38 | 0 - 4 ft | 680291-005 |
| SW47 | S | 12.08.2020 11:46 | 0 - 4 ft | 680291-006 |
| SW48 | S | 12.08.2020 11:55 | 0 - 4 ft | 680291-007 |
| SW49 | S | 12.08.2020 12:04 | 0 - 4 ft | 680291-008 |

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA

Project Name: Row 4 Wolverine SWD Riser

 Project ID:
 TE012920091
 Report Date:
 12.14.2020

 Work Order Number(s):
 680291
 Date Received:
 12.08.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW40 Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680291-001 Date Collected: 12.08.2020 10:51 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 12.09.2020 11:12 % Moisture:

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 79.7 | 9.98 | mg/kg | 12.09.2020 12:53 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW43 Matrix: Soil Date Received: 12.08.2020 16:47

Lab Sample Id: 680291-002 Date Collected: 12.08.2020 11:15 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | <10.0 | 10.0 | mg/kg | 12.09.2020 12:59 | U | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: **SW44** Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680291-003 Date Collected: 12.08.2020 11:22 Sample Depth: 0 - 3 ft

Prep Method: E300P

Analytical Method: Chloride by EPA 300

Tech: MAB

MAB Analyst:

Date Prep: 12.09.2020 11:12 % Moisture:

Basis: Wet Weight Seq Number: 3144392

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | <10.1 | 10.1 | mg/kg | 12.09.2020 13:05 | U | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW45 Matrix: Soil Date Received: 12.08.2020 16:47

Lab Sample Id: 680291-004 Date Collected: 12.08.2020 11:29 Sample Depth: 0 - 3 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 191 | 10.0 | mg/kg | 12.09.2020 13:10 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW46 Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680291-005 Date Collected: 12.08.2020 11:38 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | <10.0 | 10.0 | mg/kg | 12.09.2020 13:16 | U | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW47 Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680291-006 Date Collected: 12.08.2020 11:46 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.09.2020 11:12 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | <10.0 | 10.0 | mg/kg | 12.09.2020 13:32 | U | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW48 Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680291-007 Date Collected: 12.08.2020 11:55 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 638 | 9.98 | mg/kg | 12.09.2020 13:38 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW49 Matrix: Soil Date Received:12.08.2020 16:47

Lab Sample Id: 680291-008 Date Collected: 12.08.2020 12:04 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 3330 | 50.3 | mg/kg | 12.09.2020 13:55 | | 5 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

^{**} Surrogate recovered outside laboratory control limit.



Seq Number:

WSP USA

Row 4 Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

199.0

E300P Prep Method:

mg/kg

Date Prep: 3144392 Matrix: Solid 12.09.2020

7716778-1-BLK LCS Sample Id: 7716778-1-BKS LCSD Sample Id: 7716778-1-BSD MB Sample Id:

LCS RPD MB Spike LCS LCSD Limits %RPD Units Analysis LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.00 250.0 97 244.0 98 90-110 0 20 12.09.2020 11:46 243.5

mg/kg

E300P Analytical Method: Chloride by EPA 300 Prep Method:

Seq Number: 3144392 Matrix: Soil Date Prep: 12.09.2020 MS Sample Id: 680289-001 S MSD Sample Id: 680289-001 SD Parent Sample Id: 680289-001

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result 20 12.09.2020 12:03 Chloride 130.1 329.6 100 330.7

100

90-110

0

E300P Analytical Method: Chloride by EPA 300 Prep Method:

Seq Number: 3144392 Matrix: Soil Date Prep: 12.09.2020 680291-005 S MS Sample Id: MSD Sample Id: 680291-005 SD Parent Sample Id: 680291-005

Spike **RPD** MS MS %RPD Units Analysis **Parent** MSD **MSD** Limits Flag **Parameter** Result Result Limit Date Amount %Rec %Rec Result

12.09.2020 13:21 Chloride <10.06 201.0 201.9 100 203.6 20 101 90-110 1 mg/kg

12/6/20/4:000

Project Manager: Dan N

Address:

Company Name:

City, State ZIP:

Chain of Custody

Work Order No: Le 80 291

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

| 11. | Work Order Notes | Work O | | | EST | ANALYSIS REQUEST | Turn Around | Risa | 500 | Row 4 Water Swo Risa | R |
|-----|------------------|---------|----------------------------|----------|---|---|-------------------------|------------|-----|----------------------|------|
| 0(| | | | | | R | d | | | | |
| 01 | | Other: | ADaPT | | Deliverables: EDD | Email: Jamilottony com, demoir@leny com Den. weer @ wsp. com | mail: Hallowcon | Е | | (432) 236-3849 | (43) |
| | Level IV | RP | TSU/T8 | evel III | Reporting:Level IIIevel III\$T/USTRP Upvel IV | Carlsbad, NM 88220 | City, State ZIP: | | | Midland, TX 79705 | Mid |
| | | | | | State of Project: | 522 W. Mermod St. | Address: | | | 3300 North A Street | 330 |
| | ¶perfund | ₽ C | □ rownfields | R | Program: UST/PST ☐RP ☐rownfields ☐RC ☐perfund ☐ | Company Name: XTO Energy | Company Nam | | | WSP USA | SW |
| | | ents | Work Order Comments | Work (| | t) Kyle Littrell | Bill to: (if different) | | | Dan Moir | Dar |
| | OI | rage of | www.xenco.com | ww.xenc | | Hobbs, NM (5/5-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (7/0-449-8800) Tampa, FL (813-620-2000) | /S-39Z-755U) Prioenix, | CO MINISOR | 70 | | 1 |

| Project Name: | Row 4 Wa | Walter Swo le | Risa Turn Around | | ANALYSIS REQUEST | Work Order Notes | r Notes |
|--|--|---|---|--|---|---|-----------------|
| Project Number: | TE 012410091 | | Routine | | | | |
| P.O. Number: | 50.11 deta C | 06/01/20 | Rush: | | | | |
| Sampler's Name: | ے | Jeremy Hill | Due Date: | | | | |
| SAMPLE RECEIPT | IPT Temp Blank: | Blank: Yes No | Wet ice: Yes No | | 7 700 | | |
| Temperature (°C): | 4.0/3.8 | | Thermometer ID | ners | ~ | | |
| Received Intact: | No sec | して | LCC-MN | / | _ | | |
| Cooler Custody Seals | Yes No | N/A Correc | Correction Factor: -5. Z | 158 | | 1 | |
| Sample Custody Seals: | Yes No | N/A Total | Total Containers: | A 80 | | lab, if received by 4:30pm | by 4:30pm |
| Sample Identification | | Matrix Date Sampled | Time Depth | Number TPH-(EF | Chlorid | Sample Comments | nments |
| Smrlo | | 5 12/8/20 | 1651 0-4 | 1 | X | Corposite | |
| SHUS | | 1 | 1115 0-41 | | | | |
| SWHH | | | 1112 0-31 | | | | |
| SHAS | | | | | | | |
| Sm46 | | | | | | | |
| 512 UZ | | | 1146 0-Hi | | | | |
| SW 48 | 8 | | 11.55 0.11 | | | | |
| SHAS | | × | 1904 0.4, | 4 | 4 | • | |
| 1 | | | | | | | |
| | | | | | | | |
| Total 200.7 / 6010 Circle Method(s) a | otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed | <u>∞</u> | 8RCRA 13PPM Texas 11 TCLP / SPLP 6010: 8RCF | s 11 Al Sb As Ba RCRA Sb As Ba | Be B Cd Ca Cr Co Cu Fe Be Cd Cr Co Cu Pb Mn Mc | Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn Ni Se Ag Tl U 1631/245.1/7470 /7471: Hg | Zn 7471 : Hg |
| Votice: Signature of this d of service. Xenco will be li of Xenco. A minimum cha | ocument and relinquishn iable only for the cost of rge of \$75.00 will be appl | nent of samples constit samples and shall not a led to each project and | utes a valid purchase order assume any responsibility to a charge of \$5 for each sam | rom client company to r any losses or expensi ple submitted to Xenco | 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 Xenco. A minimum charge 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. | erms and conditions es beyond the control usly negotiated. | |
| Relinquished by: (Signature) | (Signature) | Received b | Received by: (Signature) | Date/Time | e Relinquished by: (Signature) | Received by: (Signature) Da | Date/Time |

Revised Date 051418 Rev. 2018.1

164

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 12.08.2020 04.47.00 PM Air and Metal samples Acceptable Range: Ambient

Work Order #: 680291 Temperature Measuring device used : T_NM_007

| | Sample Receipt Checklist | | Comments |
|---|--------------------------|-----|--------------------------------------|
| #1 *Temperature of cooler(s)? | | 3.8 | |
| #2 *Shipping container in good condition? | | Yes | |
| #3 *Samples received on ice? | | Yes | |
| #4 *Custody Seals intact on shipping contai | ner/ 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 relinquish | ned/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | abels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers. |
| #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 headsp | ace? | N/A | |

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

Checklist completed by:

Cloe Clifton

Checklist reviewed by:

Date: 12.08.2020

Date: 12.09.2020

Date: 12.09.2020

PH Device/Lot#:

Analyst:

eurofins Environment Testing

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Certificate of Analysis Summary 680475

LT Environmental, Inc., Arvada, CO

El Environmental, Inc., Alvaua, Co

Project Id:

TE012920091

Project Name: Row 4 Wolverine SWD Riser

Date Received in Lab: Wed 12.09.2020 16:14

Contact:

Dan Moir

Report Date: 12.14.2020 10:17

Project Location:

Project Manager: Jessica Kramer

| | Lab Id: | 680475-0 | 01 | 680475-00 |)2 | 680475-0 | 03 | 680475-00 |)4 | 680475-00 | 05 | 680475-00 |)6 |
|---------------------|------------|------------|-------|--------------|-------|------------|-------|--------------|-------|--------------|-------|--------------|-------|
| Analysis Requested | Field Id: | SW60 | | SW61 | | SW62 | | SW81 | | SW82 | | SW83 | |
| Anatysis Requested | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | Sampled: | 12.09.2020 | 09:07 | 12.09.2020 (| 9:13 | 12.09.2020 | 9:21 | 12.09.2020 (| 9:50 | 12.09.2020 (|)9:59 | 12.09.2020 1 | 0:07 |
| Chloride by EPA 300 | Extracted: | 12.10.2020 | 08:38 | 12.10.2020 (| 08:38 | 12.10.2020 | 08:38 | 12.10.2020 (| 08:38 | 12.10.2020 (| 08:38 | 12.10.2020 0 | 08:38 |
| | Analyzed: | 12.10.2020 | 12:51 | 12.10.2020 1 | 3:08 | 12.10.2020 | 13:13 | 12.10.2020 | 3:19 | 12.10.2020 | 13:24 | 12.10.2020 1 | 13:41 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 502 | 9.90 | 231 | 9.92 | 327 | 9.94 | 309 | 9.90 | 134 | 9.98 | 121 | 50.1 |

BRL - Below Reporting Limit

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

Jessica Vramer

eurofins Environment Testing

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Certificate of Analysis Summary 680475

LT Environmental, Inc., Arvada, CO

Project Name: Row 4 Wolverine SWD Riser

Project Id:

Contact:

TE012920091

Dan Moir

Date Received in Lab: Wed 12.09.2020 16:14

Report Date: 12.14.2020 10:17

Project Location:

Project Manager: Jessica Kramer

| | Lab Id: | 680475-00 |)7 | 680475-00 | 08 | 680475-00 |)9 | | |
|---------------------|------------|--------------|------|--------------|-------|--------------|-------|--|--|
| Analysis Requested | Field Id: | SW84 | | SW85 | | SW86 | | | |
| Analysis Requesieu | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | | |
| | Matrix: | SOIL | | SOIL | | SOIL | | | |
| | Sampled: | 12.09.2020 1 | 0:14 | 12.09.2020 | 0:21 | 12.09.2020 1 | 0:29 | | |
| Chloride by EPA 300 | Extracted: | 12.10.2020 0 | 8:38 | 12.10.2020 (| 08:38 | 12.10.2020 (| 08:38 | | |
| | Analyzed: | 12.10.2020 1 | 3:47 | 12.10.2020 | 3:52 | 12.10.2020 1 | 3:58 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | | |
| Chloride | | 13.1 | 10.0 | 18.5 | 9.98 | 83.2 | 9.98 | | |

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 680475

for

LT Environmental, Inc.

Project Manager: Dan Moir

Row 4 Wolverine SWD Riser TE012920091 12.14.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



12.14.2020

Project Manager: **Dan Moir LT Environmental, Inc.**4600 W. 60th Avenue
Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 680475

Row 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 680475. 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 Eurofins Xenco, LLC. 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. 680475 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 680475

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW60 | S | 12.09.2020 09:07 | 0 - 4 ft | 680475-001 |
| SW61 | S | 12.09.2020 09:13 | 0 - 4 ft | 680475-002 |
| SW62 | S | 12.09.2020 09:21 | 0 - 4 ft | 680475-003 |
| SW81 | S | 12.09.2020 09:50 | 0 - 4 ft | 680475-004 |
| SW82 | S | 12.09.2020 09:59 | 0 - 4 ft | 680475-005 |
| SW83 | S | 12.09.2020 10:07 | 0 - 4 ft | 680475-006 |
| SW84 | S | 12.09.2020 10:14 | 0 - 4 ft | 680475-007 |
| SW85 | S | 12.09.2020 10:21 | 0 - 4 ft | 680475-008 |
| SW86 | S | 12.09.2020 10:29 | 0 - 4 ft | 680475-009 |

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CASE NARRATIVE

eurofins **Environment Testing** Xenco

Client Name: LT Environmental, Inc. Project Name: Row 4 Wolverine SWD Riser

Project ID: Report Date: 12.14.2020 TE012920091 Work Order Number(s): 680475 Date Received: 12.09.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW60 Matrix: Soil Date Received:12.09.2020 16:14

Lab Sample Id: 680475-001 Date Collected: 12.09.2020 09:07 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 502 | 9.90 | mg/kg | 12.10.2020 12:51 | | 1 | _ |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: **SW61** Matrix: Soil Date Received:12.09.2020 16:14

Lab Sample Id: 680475-002 Date Collected: 12.09.2020 09:13 Sample Depth: 0 - 4 ft

Prep Method: E300P

Analytical Method: Chloride by EPA 300

Tech: MAB

% Moisture: MAB Analyst: Date Prep: 12.10.2020 08:38 Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 231 | 9.92 | mg/kg | 12.10.2020 13:08 | | 1 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW62 Matrix: Soil Date Received:12.09.2020 16:14

Lab Sample Id: 680475-003 Date Collected: 12.09.2020 09:21 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 327 | 9.94 | mg/kg | 12.10.2020 13:13 | | 1 |

LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW81 Matrix: Soil Date Received:12.09.2020 16:14

Lab Sample Id: 680475-004 Date Collected: 12.09.2020 09:50 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 309 | 9.90 | mg/kg | 12.10.2020 13:19 | | 1 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW82 Matrix: Soil Date Received:12.09.2020 16:14

Lab Sample Id: 680475-005 Date Collected: 12.09.2020 09:59 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 134 | 9.98 | mg/kg | 12.10.2020 13:24 | | 1 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW83 Matrix: Soil Date Received:12.09.2020 16:14

Lab Sample Id: 680475-006 Date Collected: 12.09.2020 10:07 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 121 | 50.1 | mg/kg | 12.10.2020 13:41 | | 5 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW84 Matrix: Soil Date Received:12.09.2020 16:14

Lab Sample Id: 680475-007 Date Collected: 12.09.2020 10:14 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 13.1 | 10.0 | mg/kg | 12.10.2020 13:47 | | 1 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW85 Matrix: Soil Date Received:12.09.2020 16:14

Lab Sample Id: 680475-008 Date Collected: 12.09.2020 10:21 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 18.5 | 9.98 | mg/kg | 12.10.2020 13:52 | | 1 |



LT Environmental, Inc., Arvada, CO

Row 4 Wolverine SWD Riser

Sample Id: SW86 Matrix: Soil Date Received:12.09.2020 16:14

Lab Sample Id: 680475-009 Date Collected: 12.09.2020 10:29 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 83.2 | 9.98 | mg/kg | 12.10.2020 13:58 | | 1 | _ |



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. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



QC Summary 680475

LT Environmental, Inc.

Row 4 Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

Seq Number: 3144560

7716881-1-BLK

Matrix: Solid

E300P Prep Method:

Date Prep: 12.10.2020

7716881-1-BSD

LCS Sample Id: MB Sample Id:

7716881-1-BKS

LCSD Sample Id:

LCS RPD MB Spike LCS LCSD Limits %RPD Units LCSD **Parameter** Result Amount Result %Rec Result %Rec Limit

Chloride <10.0 250 234 94 235 94 90-110 0 20 12.10.2020 12:40 mg/kg

Analytical Method: Chloride by EPA 300

Seq Number: 3144560

Matrix: Soil

Prep Method: Date Prep: 12.10.2020

E300P

Parent Sample Id: 680475-001

MS Sample Id: 680475-001 S MSD Sample Id:

680475-001 SD

Parameter

Parent Spike Result Amount

MS MS Result %Rec

MSD Result

684

MSD %Rec

Limits %RPD RPD Units Limit

Analysis

Analysis

Date

Flag

Chloride

502

686

92

90 90-110

20 0

mg/kg

Flag Date 12.10.2020 12:56

Analytical Method: Chloride by EPA 300

Seq Number: Parent Sample Id:

3144560

Matrix:

Soil

680478-002 S

E300P Prep Method: Date Prep:

RPD

12.10.2020

MSD Sample Id: 680478-002 SD Units

Parameter

680478-002

Parent

Spike Amount

MS MS Result %Rec

MS Sample Id:

MSD Result

MSD %Rec 90-110

Limits

Limit

%RPD

Analysis Flag Date

Chloride

Result 6220

201

199

6420 100

6410

95

0 20 mg/kg

12.10.2020 14:14

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / BRPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample A = Parent Result = MS/LCS Result E = MSD/LCSD Result

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

12.9.26

1614

Revised Date 051418 Rev. 2018.1

Received by: (Signature)

Date/Time



Chain of Custody

Work Order No: しるのリスト

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

| 3300 Nor | | LI EIIVIIC | no. IT Enviro | ger: Dan Moir | |
|--------------------|---------------------|--|---------------------|--|--|
| Midland, Tx 79705 | 3300 North A Street | Li Elivilorimental, Inc., Permian office | months I a . | | Hobbs, NM (575 |
| City State ZIP: | Address: | Company Name: XTO Energy | | Bill to: (if different) Kyle I ittrall | -392-7550) Phoenix,AZ (|
| Poporti | | | N) o ciucii | Kyle I ittrell | Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa FL (813-820-2000) |
| Reporting lawy III | State of Project: | m: ST/PST PB | Work Order Comments | Is | |
|] | 20 | 3 | nts | ge | 3 |

| | | Work Order Comments |
|-------------------|--|--|
| | | Program: UST/PST _RP |
| City. State | |) H |
| Email: Elliot.Lee | | JST [|
| | ANALYS | nuar - |
| R | | S REQUEST Work Order Notes |
| Rush: | | |
| Due Date: | | |
| | • | |
| ies | 1 | |
| Thermometer ID | 1 | |
| JM-007 | (1) | |
| | <u>5</u> | |
| Total Containers: | 4-60 | TAT starts the day received by the |
| Time Depth | PH (EX | Sample Comments |
| | | |
| | | COMPOSITE |
| | - | COMPOSITE |
| | Company Nan Sampled Company Nan Sampled Sample | Company Name: XTO Energy Address: City, State ZIP: Email: Elliot Lee@wsp.com, Tacoma Morrissey@wsp.com Turn Around Routine R Rush: Due Date: Net Ice: Yes No Tometer ID Tacoma Morrissey@wsp.com ANALYS Routine R Rush: Due Date: Net Ice: Yes No Tometer ID Tometer ID |

Sample Cus Cooler Cust Received In

Sampler's N

P.O. Number

Project Nun Project Nar

Temperatur

Phone:

City, State

1631 / 245.1 / 7470 / 7471 : Hg

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 12.09.2020 04.14.00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 680475

Analyst:

Temperature Measuring device used: T_NM_007

| | Sample Receipt Checklist | | Comments |
|---|--------------------------|-----|--------------------------------------|
| #1 *Temperature of cooler(s)? | | 13 | |
| #2 *Shipping container in good condition? | | Yes | |
| #3 *Samples received on ice? | | Yes | |
| #4 *Custody Seals intact on shipping contain | er/ 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 relinquish | ed/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | bels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers. |
| #13 Samples properly preserved? | | Yes | |
| #14 Sample container(s) intact? | | Yes | |
| #15 Sufficient sample amount for indicated to | est(s)? | Yes | |
| #16 All samples received within hold time? | | Yes | |
| #17 Subcontract of sample(s)? | | No | |
| #18 Water VOC samples have zero headspa | ace? | N/A | |

| * Must be | completed for | after-hours | delivery of | samples | prior to | placing in | the i | refrigerato | 16 |
|-----------|---------------|-------------|-------------|---------|----------|------------|-------|-------------|----|
| | | | | | | | | | |

| Checklist completed by: | Cloe Clifton | Date: 12.09.2020 |
|-------------------------|----------------|------------------|
| Checklist reviewed by: | Jessica Vramer | Date: 12.10.2020 |

Jessica Kramer

PH Device/Lot#:

Certificate of Analysis Summary 680478 WSP USA, Dallas, TX

eurofins
Environment Testing

Project Name: Row 4 Wolverine SWD Riser

Project Id:

TE012920091

Dan Moir

Date Received in Lab: Wed 12.09.2020 16:18

Report Date: 12.14.2020 10:18

Project Location:

Contact:

Project Manager: Jessica Kramer

| | Lab Id: | 680478-00 |)1 | 680478-00 |)2 | 680478-00 |)3 | 680478-0 | 04 | | |
|---------------------|------------|--------------|------------------|--------------|------------------|--------------|------------------|------------|-------|--|--|
| Analysis Requested | Field Id: | SW70 | | SW71 | | SW72 | | SW73 | | | |
| Analysis Requesieu | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | | |
| | Sampled: | 12.09.2020 1 | 0:36 | 12.09.2020 1 | 0:43 | 12.09.2020 1 | 0:51 | 12.09.2020 | 10:59 | | |
| Chloride by EPA 300 | Extracted: | 12.10.2020 0 | 12.10.2020 08:38 | | 12.10.2020 08:38 | | 12.10.2020 08:38 | | | | |
| | Analyzed: | 12.10.2020 1 | 12.10.2020 14:03 | | 12.10.2020 14:09 | | 12.10.2020 14:26 | | 14:31 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | | |
| Chloride | | 46.9 | 9.90 | 6220 | 99.0 | 2990 | 50.4 | 222 | 9.92 | | |

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 680478

for

WSP USA

Project Manager: Dan Moir

Row 4 Wolverine SWD Riser TE012920091 12.14.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



12.14.2020

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 680478

Row 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 680478. 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 Eurofins Xenco, LLC. 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. 680478 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 680478

WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW70 | S | 12.09.2020 10:36 | 0 - 4 ft | 680478-001 |
| SW71 | S | 12.09.2020 10:43 | 0 - 4 ft | 680478-002 |
| SW72 | S | 12.09.2020 10:51 | 0 - 4 ft | 680478-003 |
| SW73 | S | 12.09.2020 10:59 | 0 - 4 ft | 680478-004 |

Page 338 of 520

CASE NARRATIVE

💸 eurofins **Environment Testing** Xenco

Client Name: WSP USA

Project Name: Row 4 Wolverine SWD Riser

Project ID: Report Date: 12.14.2020 TE012920091 Work Order Number(s): 680478 Date Received: 12.09.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW70 Matrix: Soil Date Received:12.09.2020 16:18

Lab Sample Id: 680478-001 Date Collected: 12.09.2020 10:36 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 46.9 | 9.90 | mg/kg | 12.10.2020 14:03 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW71 Matrix: Soil Date Received:12.09.2020 16:18

Lab Sample Id: 680478-002 Date Collected: 12.09.2020 10:43 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 6220 | 99.0 | mg/kg | 12.10.2020 14:09 | | 10 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW72 Matrix: Soil Date Received:12.09.2020 16:18

Lab Sample Id: 680478-003 Date Collected: 12.09.2020 10:51 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 2990 | 50.4 | mg/kg | 12.10.2020 14:26 | | 5 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

12.10.2020 08:38

Sample Id: **SW73** Matrix: Soil Date Received:12.09.2020 16:18

Lab Sample Id: 680478-004 Date Collected: 12.09.2020 10:59 Sample Depth: 0 - 4 ft

Date Prep:

Analytical Method: Chloride by EPA 300

Tech: MAB

MAB Analyst:

Seq Number: 3144560

Prep Method: E300P

% Moisture:

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 222 | 9.92 | mg/kg | 12.10.2020 14:31 | | 1 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

^{**} Surrogate recovered outside laboratory control limit.

E300P

E300P

E300P

Prep Method:

Prep Method:

Prep Method:

QC Summary 680478

WSP USA

Row 4 Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

Matrix: Solid Date Prep: Seq Number: 3144560 12.10.2020 7716881-1-BLK LCS Sample Id: 7716881-1-BKS LCSD Sample Id: 7716881-1-BSD MB Sample Id:

LCS RPD MB Spike LCS LCSD Limits %RPD Units Analysis LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date

Chloride <10.0 250 234 94 235 94 90-110 0 20 12.10.2020 12:40 mg/kg

Analytical Method: Chloride by EPA 300

Seq Number: 3144560 Matrix: Soil Date Prep: 12.10.2020 MS Sample Id: 680475-001 S MSD Sample Id: 680475-001 SD Parent Sample Id: 680475-001

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result

20 12.10.2020 12:56 Chloride 502 199 686 92 684 90 90-110 0 mg/kg

Analytical Method: Chloride by EPA 300

3144560 Seq Number: Matrix: Soil Date Prep: 12.10.2020 MS Sample Id: 680478-002 S MSD Sample Id: 680478-002 SD 680478-002

Parent Sample Id:

%RPD **RPD Parent** Spike MS MS Units MSD **MSD** Limits Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec 12.10.2020 14:14 Chloride 6220 201 6420 100 6410 95 90-110 0 20 mg/kg

| Pa | ge | 345 | of | 520 |
|-------|----|-----|----|-----|
| Droin | 4 | | 1 | |

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 Chain of Custody

Work Order No: 680478

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 ctice: 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 Xenco. A minimum charge 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. Sample Custody Seals: Relinquished by: (Signature) Received Intact: P.O. Number: Project Number Project Name: Address: cooler Custody Seals: emperature (°C): City, State ZIP: SAMPLE RECEIPT Company Name: Total 200.7 / 6010 Circle Method(s) and Metal(s) to be analyzed roject Manager: Sample Identification 25-71 5470 8L79 SWZ Spill date (432) 236-3849 Midland, TX 79705 Dan Moir WSP USA 3300 North A Street TE013930091 low 4 Williams 200.8 / 6020: Yes Yes Yes O Temp Blank: / χes 10.6 Jeremy Hill 06/1/0 No Matrix N/A NA を Received by: (Signature) 00/0/cl Sampled Date SWD Pire Correction Factor: No Total Containers: Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) 8RCRA 1500-MUNI TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Thermometer ID Sampled 1636 1051 1659 1643 Time Wet Ice: Yes 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Rush: Routine Due Date Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296 Turn Around 10 6-41 C Jamester Com James Cusp, com City, State ZIP: Company Name: Bill to: (if different) Address: Depth No 29.20 **Number of Containers** Date/Time TPH (EPA 8015) Carlsbad, NM 88220 XTO Energy 522 W. Mermod St Kyle Littrell BTEX (EPA 6 X Chloride (EPA 300.0) Relinquished by: (Signature) ANALYSIS REQUEST Fe Pb Mg Deliverables: EDD Program: UST/PST Mn Mo Ni State of Project: Received by: (Signature) K Se www.xenco.com □RP □rownfields Ag Work Order Comments SiO2 Na Sr TI Sn U V Zn ADaPT 1631 / 245.1 / 7470 / 7471 : Hg TAT starts the day recevied by the lab, if received by 4:30pm Corner Page Sample Comments **Work Order Notes** 20 Date/Time 1 perfund of

Revised Date 051418 Rev. 2018 :

Received by OCD:

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 12.09.2020 04.18.00 PM Air and Metal samples Acceptable Range: Ambient

Work Order #: 680478 Temperature Measuring device used : T_NM_007

| | Sample Receipt Checklist | | Comments |
|---|--------------------------|----|--------------------------------------|
| #1 *Temperature of cooler(s)? |). | 6 | |
| #2 *Shipping container in good condition? | Ye | es | |
| #3 *Samples received on ice? | Ye | es | |
| #4 *Custody Seals intact on shipping contain | ner/ cooler? | es | |
| #5 Custody Seals intact on sample bottles? | Ye | es | |
| #6*Custody Seals Signed and dated? | Ye | es | |
| #7 *Chain of Custody present? | Ye | es | |
| #8 Any missing/extra samples? | N | 0 | |
| #9 Chain of Custody signed when relinquish | ed/ received? | es | |
| #10 Chain of Custody agrees with sample la | bels/matrix? Ye | es | |
| #11 Container label(s) legible and intact? | Ye | es | |
| #12 Samples in proper container/ bottle? | Ye | es | Samples received in bulk containers. |
| #13 Samples properly preserved? | Ye | es | |
| #14 Sample container(s) intact? | Ye | es | |
| #15 Sufficient sample amount for indicated to | est(s)? | es | |
| #16 All samples received within hold time? | Ye | es | |
| #17 Subcontract of sample(s)? | N | 0 | |
| #18 Water VOC samples have zero headspa | ace? N | /A | |

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

Checklist completed by:

Cloe Clifton

Checklist reviewed by:

Jessica Kramer

Date: 12.09.2020

Date: 12.10.2020

PH Device/Lot#:

Analyst:

Page 347 of 520

Certificate of Analysis Summary 681577 WSP USA, Dallas, TX

eurofins Environment Testing

Project Name: Row 4 Wolverine SWD Riser

Project Id:

Project Location:

Contact:

TE012920091

Dan Moir

Date Received in Lab: Wed 12.16.2020 16:27

Report Date: 12.21.2020 09:50

Project Manager: Jessica Kramer

| | Lab Id: | 681577-00 |)1 | 681577-00 | 02 | 681577-00 | 03 | | |
|---------------------|------------|--------------|------|--------------|------|------------|-------|--|--|
| Analysis Requested | Field Id: | SW87 | | SW88 | | SW89 | | | |
| Analysis Requesieu | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | | |
| | Matrix: | SOIL | | SOIL | | SOIL | | | |
| | Sampled: | 12.16.2020 1 | 1:34 | 12.16.2020 1 | 1:41 | 12.16.2020 | 11:49 | | |
| Chloride by EPA 300 | Extracted: | 12.17.2020 1 | 2:43 | 12.17.2020 1 | 2:43 | 12.17.2020 | 12:43 | | |
| | Analyzed: | 12.18.2020 1 | 2:58 | 12.18.2020 1 | 3:15 | 12.18.2020 | 13:22 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | | |
| Chloride | | 22.6 | 9.94 | 14.4 | 9.92 | 358 | 9.94 | | |

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 681577

for

WSP USA

Project Manager: Dan Moir

Row 4 Wolverine SWD Riser TE012920091 12.21.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



12.21.2020

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 681577

Row 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 681577. 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 Eurofins Xenco, LLC. 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. 681577 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 681577

WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW87 | S | 12.16.2020 11:34 | 0 - 4 ft | 681577-001 |
| SW88 | S | 12.16.2020 11:41 | 0 - 4 ft | 681577-002 |
| SW89 | S | 12.16.2020 11:49 | 0 - 4 ft | 681577-003 |

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA

Project Name: Row 4 Wolverine SWD Riser

 Project ID:
 TE012920091
 Report Date:
 12.21.2020

 Work Order Number(s):
 681577
 Date Received:
 12.16.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW87 Matrix: Soil Date Received:12.16.2020 16:27

Lab Sample Id: 681577-001 Date Collected: 12.16.2020 11:34 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 22.6 | 9.94 | mg/kg | 12.18.2020 12:58 | | 1 | _ |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW88 Matrix: Soil Date Received:12.16.2020 16:27

Lab Sample Id: 681577-002 Date Collected: 12.16.2020 11:41 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 14.4 | 9.92 | mg/kg | 12.18.2020 13:15 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW89 Matrix: Soil Date Received:12.16.2020 16:27

Lab Sample Id: 681577-003 Date Collected: 12.16.2020 11:49 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 358 | 9.94 | mg/kg | 12.18.2020 13:22 | | 1 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

^{**} Surrogate recovered outside laboratory control limit.



Parameter

WSP USA

Row 4 Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

Prep Method: Matrix: Solid Seq Number: 3145340 Date Prep: 12.17.2020

7717428-1-BLK LCS Sample Id: 7717428-1-BKS LCSD Sample Id: 7717428-1-BSD MB Sample Id: LCS RPD MB Spike LCS LCSD Limits %RPD Units Analysis LCSD Flag

Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 244 98 99 90-110 20 12.18.2020 12:46 247 1 mg/kg

Analytical Method: Chloride by EPA 300

E300P Prep Method: Seq Number: 3145340 Matrix: Soil Date Prep: 12.17.2020 681577-001 MS Sample Id: 681577-001 S MSD Sample Id: 681577-001 SD Parent Sample Id:

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result

20 12.18.2020 13:04 Chloride 22.6 200 213 95 215 96 90-110 1 mg/kg

Analytical Method: Chloride by EPA 300

E300P Prep Method: 3145340 Seq Number: Matrix: Soil Date Prep: 12.17.2020

MS Sample Id: 681584-002 S MSD Sample Id: 681584-002 SD Parent Sample Id: 681584-002

Spike **RPD** MS MS %RPD Units Analysis **Parent** MSD **MSD** Limits Flag **Parameter** Result Result Limit Date Amount %Rec %Rec Result 12.18.2020 14:58 Chloride 11600 201 11800 100 11800 90-110 0 20 mg/kg 100

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / BRPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample A = Parent Result = MS/LCS Result E = MSD/LCSD Result

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

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E300P

Page 357 of 520

Project Manager: Dan Moir

Midland, TX 79705 3300 North A Street

Address:

Company Name:

Program: UST/PST ☐RP ☐rownfields ☐RC

∑perfund

www.xenco.com

Page_

9

Work Order Comments

State of Project:

Carlsbad, NM 88220 522 W. Mermod St. XTO Energy

Company Name: \ddress:

WSP USA

Chain of Custody

Work Order No: 6 \$1574

Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) 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 Bill to: (if different) Kyle Littrell

| Pauland Data 051448 Day 2019 1 | | | 6 | | | | |
|---|---|---|--|--|--|---|--|
| | | 7 | 12.16.26 11.02 | | Clie Coult | 1. | Shrie |
| Date/Time | Received by: (Signature) | Relinquished by: (Signature) | Date/Time | ignature) | Received by: (Signature) | : (Signature) | Relinquished by: (Signature) |
| | rd terms and conditions ances beyond the control sviously negotiated. | office: 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 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 Xenco. A minimum charge 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. | n client company to Xenco, its aff ny losses or expenses incurred b submitted to Xenco, but not anal | valid purchase order frone e any responsibility for a rge of \$5 for each sample | nent of samples constitutes a samples and shall not assum lied to each project and a cha | document and relinquishn liable only for the cost of arge of \$75.00 will be appl | otice: Signature of this of service. Xenco will be Xenco. A minimum ch |
| Na Sr TI Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg | g SiO2 | B Cd Ca Cr Co Cu Fe Pb Mg Mn Cd Cr Co Cu Pb Mn Mo Ni Se Ag | I1 AI Sb As Ba Be B CRA Sb As Ba Be Cd | RCRA 13PPM Texas 11 A TCLP / SPLP 6010: 8RCRA | o: 8RCRA TCLP | otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed | Total 200.7 / 6010 Circle Method(s) a |
| | | | | | | | |
| | | | | | | | |
| | | | (P | | | | |
| | | | | | / | | |
| | | | | | / | | 1 |
| 4 | | | 6 | 1148 1 | 11 4 1 | | 5081 |
| | | | | 41 | 1 1141 | | 82088 |
| Corport | | | - × | 34 0-41 | \$ 1416/20 1134 | | L8 ms |
| Sample Comments | 60 | | Number TRH (EI BTEX (I | Time Depth | Matrix Date Time Sampled | | Sample Identification |
| lab, if received by 4:30pm | | | PA 80 | ainers: | N/A Total Containers: | Yes \(No) | Sample Custody Seals: |
| TAT starts the day received by the | TAT | |)15))=802 | actor: ~8, 2 | N/A Correction Factor: | Yes No | Cooler Custody Seals: |
| | | | 44, | Thermometer ID | 0 | 10.2/6 | Temperature (°C): |
| | | | San | Wet Ice: (Yes) No | √es) No | EIPT Temp Blank: | SAMPLE RECEIPT |
| | | | | Due Date: | Jeremy Hill | Jer | Sampler's Name: |
| | | | | Rush: | 6/1/20 | Sp. 11 dete | P.O. Number: |
| | | | | Routine P | 1300 | TE 013430051 | Project Number: |
| Work Order Notes | | ANALYSIS REQUEST | | Turn Around | enc Swill Riser | Row 4 Warran | Project Name: |
| Other: | Deliverables: EDD ADaPT | | Email: Jeremy.Hill@wsp.com, Dan.Moir@wsp.com | Email: Jeremy.Hill@ | | (432) 236-3849 | Phone: |
| □RP UsveIIV | Reporting:Level III Pevel III FT/UST | | P: Carlsbad, NM 88220 | City, State ZIP: | 5 | Midland, TX 79705 | City, State ZIP: |

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 12.16.2020 04.27.00 PM Air and Metal samples Acceptable Range: Ambient

Work Order #: 681577 Temperature Measuring device used : T_NM_007

| \$ | Sample Receipt Checklist | | Comments |
|--|--------------------------|-----|--------------------------------------|
| #1 *Temperature of cooler(s)? | (| 6 | |
| #2 *Shipping container in good condition? | Y | es | |
| #3 *Samples received on ice? | Y | es | |
| #4 *Custody Seals intact on shipping contained | er/ cooler? | es | |
| #5 Custody Seals intact on sample bottles? | Y | es | |
| #6*Custody Seals Signed and dated? | Y | es | |
| #7 *Chain of Custody present? | Y | es | |
| #8 Any missing/extra samples? | N | lo | |
| #9 Chain of Custody signed when relinquishe | d/ received? | es | |
| #10 Chain of Custody agrees with sample lab | els/matrix? | es | |
| #11 Container label(s) legible and intact? | Y | es | |
| #12 Samples in proper container/ bottle? | Y | es | Samples received in bulk containers. |
| #13 Samples properly preserved? | Y | es | |
| #14 Sample container(s) intact? | Y | es | |
| #15 Sufficient sample amount for indicated te | st(s)? | es | |
| #16 All samples received within hold time? | Y | es | |
| #17 Subcontract of sample(s)? | N | 10 | |
| #18 Water VOC samples have zero headspace | ce? N | I/A | |

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

| Checklist completed by: | Cloe Clifton | Date: <u>12.17.2020</u> |
|-------------------------|--------------------------------|-------------------------|
| Checklist reviewed by: | Jessica Warmer Jessica Kramer | Date: <u>12.18.2020</u> |

PH Device/Lot#:

Analyst:

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Certificate of Analysis Summary 681972

WSP USA, Dallas, TX

eurofins Environment Testing

Eddy County, New Mexico

Project Name: Wolverine SWD Riser

Project Id: TE012920091

Contact:

Project Location:

Date Received in Lab: Fri 12.18.2020 16:55

Report Date: 12.23.2020 11:46 Dan Moir

Project Manager: Jessica Kramer

| | Lab Id: | 681972-001 | | 681972-00 |)2 | | |
|---------------------|------------|------------------|------|------------------|------|--|--|
| Analysis Requested | Field Id: | SW10 | | SW11 | | | |
| | Depth: | 0-4 ft | | 0-4 ft | | | |
| | Matrix: | SOIL | | SOIL | | | |
| | Sampled: | 12.19.2020 15:10 | | 12.19.2020 1 | 5:15 | | |
| Chloride by EPA 300 | Extracted: | 12.19.2020 18:08 | | 12.19.2020 1 | 8:08 | | |
| | Analyzed: | 12.21.2020 12:10 | | 12.21.2020 12:16 | | | |
| | Units/RL: | mg/kg l | RL | mg/kg | RL | | |
| Chloride | | <9.96 9 | 9.96 | 58.2 | 9.98 | | |

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 681972

for

WSP USA

Project Manager: Dan Moir

Wolverine SWD Riser TE012920091 12.23.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



12.23.2020

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 681972

Wolverine SWD Riser

Project Address: Eddy County, New Mexico

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 681972. 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 Eurofins Xenco, LLC. 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. 681972 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 Eurofins Xenco, LLC 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

Jessica Vermer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 681972

WSP USA, Dallas, TX

Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW10 | S | 12.19.2020 15:10 | 0 - 4 ft | 681972-001 |
| SW11 | S | 12.19.2020 15:15 | 0 - 4 ft | 681972-002 |

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA

Project Name: Wolverine SWD Riser

 Project ID:
 TE012920091
 Report Date:
 12.23.2020

 Work Order Number(s):
 681972
 Date Received:
 12.18.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW10 Matrix: Soil Date Received:12.18.2020 16:55

Lab Sample Id: 681972-001 Date Collected: 12.19.2020 15:10 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | < 9.96 | 9.96 | mg/kg | 12.21.2020 12:10 | U | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW11 Matrix: Soil Date Received:12.18.2020 16:55

Lab Sample Id: 681972-002 Date Collected: 12.19.2020 15:15 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 58.2 | 9.98 | mg/kg | 12.21.2020 12:16 | | 1 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

Final 1.000

^{**} Surrogate recovered outside laboratory control limit.

QC Summary 681972

eurofins Environment Testing Xenco

WSP USA

Wolverine SWD Riser

Analytical Method:Chloride by EPA 300Prep Method:E300PSeq Number:3145669Matrix: SolidDate Prep:12.19.2020

MB Sample Id: 7717518-1-BLK LCS Sample Id: 7717518-1-BKS LCSD Sample Id: 7717518-1-BSD

LCS RPD MB Spike LCS LCSD Limits %RPD Units Analysis LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 104 261 90-110 0 20 12.21.2020 09:34 261 104 mg/kg

Analytical Method: Chloride by EPA 300 Prep Method: E300P

 Seq Number:
 3145669
 Matrix:
 Soil
 Date Prep:
 12.19.2020

 Parent Sample Id:
 681884-001
 MS Sample Id:
 681884-001 S
 MSD Sample Id:
 681884-001 SD

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result 258 20 12.21.2020 09:52 Chloride 46.5 199 258 106 106 90-110 0 mg/kg

Analytical Method: Chloride by EPA 300 Prep Method: E300P

 Seq Number:
 3145669
 Matrix:
 Soil
 Date Prep:
 12.19.2020

 Parent Sample Id:
 681884-011
 MS Sample Id:
 681884-011 S
 MSD Sample Id:
 681884-011 SD

%RPD **RPD** Spike MS MS Units Analysis **Parent** MSD **MSD** Limits Flag **Parameter** Result Result %Rec Limit Date Amount %Rec Result

Chloride <9.96 199 208 105 205 103 90-110 1 20 mg/kg 12.21.2020 11:16

Chain of Custody

| Relinquished by: (Signature) | of Xenco. A minimum charge of \$75.00 | 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 continuous Notice: Signature of this document and relinquishment 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 Notice: Signature of this document and relinquishment 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 such assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of such assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of such assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of such assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of such assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of such assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of such assume any responsibility for any losses are due to circumstances beyond the control of such assume any responsibility for any losses are due to circumstances beyond the control of such assume any responsibility for any losses are due to circumstances beyond the control of such assume any responsibility for any losses are due to circumstances beyond the control of such assume any responsibility for any losses are due to circumstances beyond the control of such assume any responsibility for any losses are due to circumstances. | Total 200.7 / 6010 200.8 / 6020: | | | | / | 1.MC | SIMO | 6.110 | Sample Identification | Sample Custody Seals: Tes | 1 | | C. | SAMPLE RECEIPT | 1 | P.O. Number: | Project Number: | Project Name: | Phone: (432) 230 3310 | ale zir. | | | | Project Manager: Dan Moir | | XENO |
|------------------------------|---------------------------------------|--|--|---|-------|-----------|---|------|--|--------------|-----------------------|---------------------------|----------|--|------|-----------------|------|--------------|-----------------|---------------|-----------------------|----------------------------------|--------------------|------------------|-----------------------------|---------------------------|--|--|
| | will be applied to each project the | relinquishment of samples constitute the cost of samples and shall not a | 200.8 / 6020: 8RCRA Metal(s) to be analyzed TCLP | | | | | | 5 12/18/20 15 | 7 12/1/20 15 | ۵ | Dat | NO N/A | N/A Corre | E.S. | Blank: (Yes) No | vaka | Eddy County | 15017170-11 | 10070091 | 1 | 249 | 79705 | Street | WSP USA Inc, Permian office | | Hobbs,NM | Ö |
| Ce (hall signamic) | (Signature) | es a valid purchase order from sume any responsibility for an charge of \$5 for each sample s | RCRA 13PPM Texas 11 A | | Se Se | 0, | | | 15 0'-4' | 10 01-41 | d Debar | Denth | <u>ා</u> | 0,2 | 100 | (es) No | | 2 | Rush: | Pouting N | | Email: enaka@ltenv.cor | City, State ZIP: | Address: | Company Name: | Bill to: (if different) | 5/5-392-7550) Filoeliix,74 | Houston,TX (281) 240-4200 Midland,TX (432-704-5440 |
| 55 | Date/Time | client company to Xenco, its al y losses or expenses incurred I submitted to Xenco, but not ana | 1 Al Sb As Ba Be B RA Sb As Ba Be Co | | 200 | 11 1 1 CO | | | ~ | _ | TPI | mbei H (EPA EX (E | A 80 | 015) 0=80 | 21) | ers | | | | | | enaka@ltenv.com, dmoir@ltenv.com | Carlsbad, NM 88220 | 522 West Mermond | XTO Energy | Kyle Littlell | Hobbs, NM (5/5-392-7550) Filipellix, NZ (100-000-0000) | iouston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-333 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 AZ (432-704-5440) EL Paso,TX (915)585-3463 Lubbock,TX (806)794-1296 AZ (432-704-5440) EL Paso,TX (915)585-3463 Lubbock,TX (806)794-1296 AZ (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 AZ (432-704-649-8800) Tampa,FL (806)794 AZ (432-704-649-8800) AZ (432-704-6 |
| | Relinquished by: (Signature) | filiates and subcontractors. It assigns the client if such losses are due by the client if such losses are due byzed. These terms will be enforced. | B Cd Ca Cr Co Cu Fe P Cd Cr Co Cu Pb Mn Mo | | | | | | | | | | | | | | | | | | ANALYSIS REQUEST | | | | | | | 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 Midland,TX (436-3454,0900) Atlanta GA (770-449-8800) Tampa,FL (813-620-2000) |
| | iture) Receive | gns standard terms and conditions to circumstances beyond the conditions of the cond | Co Cu Fe Pb Mg Mn Mo Ni K Se Pb Mn Mo Ni Se Ag Ti U | | | | | | | | | | | | | | | | | | ST | Deliverapies. LDD | | | | Program: UST/PST | | |
| | Received by: (Signature) | ontrol | g SiO2 | 1 | | | | | Compression of the Compression o | | 'Somoos' | Sam | ido, . | TAT starts | | | | | | | Wor | = | ADaPT | ∏eveIIII | | RP Trownfields RC | Work Order Comments | www.xenco.com Page |
| | Date/Time | | Na Sr TI Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg | | | | | | . 10 | 7 | * | Sample Comments | | TAT starts the day recevied by the lab if received by 4:30pm | | | | | | | Work Order Notes | | CD | RP Ubvel IV | | C Derfund | | of _ |

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 12.19.2020 04.55.00 PM Air and Metal samples Acceptable Range: Ambient

Work Order #: 681972 Temperature Measuring device used : T_NM_007

| | Sample Receipt Checklist | | Comments |
|---|--------------------------|-----|-------------------------------------|
| #1 *Temperature of cooler(s)? | | 4.8 | |
| #2 *Shipping container in good condition? | | Yes | |
| #3 *Samples received on ice? | | Yes | |
| #4 *Custody Seals intact on shipping contain | ner/ 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 | ed/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | bels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers |
| #13 Samples properly preserved? | | Yes | |
| #14 Sample container(s) intact? | | Yes | |
| #15 Sufficient sample amount for indicated to | est(s)? | Yes | |
| #16 All samples received within hold time? | | Yes | |
| #17 Subcontract of sample(s)? | | No | |
| #18 Water VOC samples have zero headspa | ace? | N/A | |

| * Must be completed for after-hours deliver | v of samp | oles prior to | placing in the | he refrigerator |
|---|-----------------|--|----------------|-----------------|
| made be completed for ditor medic deliver | <i>,</i> 0. 0ap | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | p.aog t. | |

| Checklist completed by: | Clos auth | Date: 12.21.2020 |
|-------------------------|----------------|------------------|
| | Cloe Clifton | |
| Checklist reviewed by: | Jessica Vramer | Date: 12.21.2020 |

Jessica Kramer

PH Device/Lot#:

Analyst:

eurofins Environment Testing

Certificate of Analysis Summary 682134

WSP USA, Dallas, TX

Project Name: Wolverine SWD Riser

Project Id:

TE012920091

Date Received in Lab: Mon 12.21.2020 16:43

Contact:

Dan Moir

Report Date: 12.28.2020 11:43

Project Location:

Eddy County, New Mexico

Project Manager: Jessica Kramer

| | Lab Id: | 682134-0 | 01 | 682134-00 |)2 | 682134-00 |)3 | 682134-0 | 04 | 682134-0 | 05 | 682134-00 |)6 |
|---------------------|------------|--------------|------------------|------------------|------------------|------------|------|------------|-------|------------|-------|--------------|------|
| Analysis Requested | Field Id: | SW50 | | SW52 | | SW53 | | SW54 | | SW03 | | SW04 | |
| Analysis Requesieu | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | |
| | Matrix: | SOIL | SOIL | | SOIL | | SOIL | | | SOIL | | SOIL | |
| | Sampled: | 12.21.2020 (| 12.21.2020 09:10 | | 12.21.2020 09:15 | | 9:20 | 12.21.2020 | 09:25 | 12.21.2020 | 10:25 | 12.21.2020 1 | 0:30 |
| Chloride by EPA 300 | Extracted: | 12.22.2020 | 11:00 | 12.22.2020 11:00 | | 12.22.2020 | 1:00 | 12.22.2020 | 11:00 | 12.22.2020 | 11:00 | 12.22.2020 1 | 1:00 |
| | Analyzed: | 12.22.2020 | 13:02 | 12.22.2020 1 | 3:20 | 12.22.2020 | 3:26 | 12.22.2020 | 13:32 | 12.22.2020 | 13:38 | 12.22.2020 1 | 3:56 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 176 | 9.92 | 19.2 | 9.96 | 18.7 | 10.0 | 127 | 10.0 | 15.8 | 9.98 | 15.8 | 9.92 |

BRL - Below Reporting Limit

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

Jessica Vramer

eurofins Environment Testing

Certificate of Analysis Summary 682134

WSP USA, Dallas, TX

Project Name: Wolverine SWD Riser

Project Id:

TE012920091

Date Received in Lab: Mon 12.21.2020 16:43

Contact:

Dan Moir

Report Date: 12.28.2020 11:43

Project Location:

Eddy County, New Mexico

Project Manager: Jessica Kramer

| | Lab Id: | 682134-00 | 07 | 682134-00 |)8 | 682134-00 |)9 | 682134-0 | 10 | | |
|---------------------|------------|------------|------------------|-----------|------------------|--------------|------|------------|-------|--|--|
| Analysis Requested | Field Id: | SW42 | | SW41 | | SW36 | | SW37 | | | |
| Anatysis Requested | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | | |
| | Matrix: | SOIL | SOIL | | SOIL | | | SOIL | | | |
| | Sampled: | 12.21.2020 | 12.21.2020 12:30 | | 12.21.2020 12:35 | | 3:20 | 12.21.2020 | 13:25 | | |
| Chloride by EPA 300 | Extracted: | 12.22.2020 | 12.22.2020 11:00 | | 1:00 | 12.22.2020 1 | 1:00 | 12.22.2020 | 11:00 | | |
| | Analyzed: | 12.22.2020 | 12.22.2020 14:02 | | 4:08 | 12.22.2020 1 | 4:14 | 12.22.2020 | 14:20 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | | |
| Chloride | | 36.8 | 9.94 | 23.8 | 9.96 | 268 | 10.0 | 243 | 9.98 | | |

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 682134

for

WSP USA

Project Manager: Dan Moir

Wolverine SWD Riser TE012920091 12.28.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



12.28.2020

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 682134

Wolverine SWD Riser

Project Address: Eddy County, New Mexico

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 682134. 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 Eurofins Xenco, LLC. 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. 682134 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 Eurofins Xenco, LLC 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

Jessica Vermer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 682134

WSP USA, Dallas, TX

Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW50 | S | 12.21.2020 09:10 | 0 - 4 ft | 682134-001 |
| SW52 | S | 12.21.2020 09:15 | 0 - 4 ft | 682134-002 |
| SW53 | S | 12.21.2020 09:20 | 0 - 4 ft | 682134-003 |
| SW54 | S | 12.21.2020 09:25 | 0 - 4 ft | 682134-004 |
| SW03 | S | 12.21.2020 10:25 | 0 - 4 ft | 682134-005 |
| SW04 | S | 12.21.2020 10:30 | 0 - 4 ft | 682134-006 |
| SW42 | S | 12.21.2020 12:30 | 0 - 4 ft | 682134-007 |
| SW41 | S | 12.21.2020 12:35 | 0 - 4 ft | 682134-008 |
| SW36 | S | 12.21.2020 13:20 | 0 - 4 ft | 682134-009 |
| SW37 | S | 12.21.2020 13:25 | 0 - 4 ft | 682134-010 |

Page 375 of 520

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA

Project Name: Wolverine SWD Riser

 Project ID:
 TE012920091
 Report Date:
 12.28.2020

 Work Order Number(s):
 682134
 Date Received:
 12.21.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW50 Matrix: Soil Date Received:12.21.2020 16:43

Lab Sample Id: 682134-001 Date Collected: 12.21.2020 09:10 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 176 | 9.92 | mg/kg | 12.22.2020 13:02 | | 1 | _ |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW52 Matrix: Soil Date Received:12.21.2020 16:43

Lab Sample Id: 682134-002 Date Collected: 12.21.2020 09:15 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 19.2 | 9.96 | mg/kg | 12.22.2020 13:20 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW53 Matrix: Soil Date Received:12.21.2020 16:43

Lab Sample Id: 682134-003 Date Collected: 12.21.2020 09:20 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 18.7 | 10.0 | mg/kg | 12.22.2020 13:26 | | 1 | _ |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW54 Matrix: Soil Date Received:12.21.2020 16:43

Lab Sample Id: 682134-004 Date Collected: 12.21.2020 09:25 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.22.2020 11:00 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 127 | 10.0 | mg/kg | 12.22.2020 13:32 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW03 Matrix: Soil Date Received:12.21.2020 16:43

Lab Sample Id: 682134-005 Date Collected: 12.21.2020 10:25 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 15.8 | 9.98 | mg/kg | 12.22.2020 13:38 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW04 Matrix: Soil Date Received:12.21.2020 16:43

Lab Sample Id: 682134-006 Date Collected: 12.21.2020 10:30 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Seq Number: 3146061

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|--|
| Chloride | 16887-00-6 | 15.8 | 9.92 | mg/kg | 12.22.2020 13:56 | | 1 | |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW42 Matrix: Soil Date Received:12.21.2020 16:43

Lab Sample Id: 682134-007 Date Collected: 12.21.2020 12:30 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 36.8 | 9.94 | mg/kg | 12.22.2020 14:02 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW41 Matrix: Soil Date Received:12.21.2020 16:43

Lab Sample Id: 682134-008 Date Collected: 12.21.2020 12:35 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 23.8 | 9.96 | mg/kg | 12.22.2020 14:08 | | 1 | _ |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW36 Matrix: Soil Date Received:12.21.2020 16:43

Lab Sample Id: 682134-009 Date Collected: 12.21.2020 13:20 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.22.2020 11:00 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 268 | 10.0 | mg/kg | 12.22.2020 14:14 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW37 Matrix: Soil Date Received:12.21.2020 16:43

Lab Sample Id: 682134-010 Date Collected: 12.21.2020 13:25 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 243 | 9.98 | mg/kg | 12.22.2020 14:20 | | 1 | _ |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

^{**} Surrogate recovered outside laboratory control limit.

Seq Number:

Flag

QC Summary 682134

eurofins **Environment Testing** Xenco

WSP USA

Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

E300P Prep Method:

3146061 Date Prep: Matrix: Solid 12.22.2020

MB Sample Id: 7717660-1-BLK LCS Sample Id: 7717660-1-BKS LCSD Sample Id: 7717660-1-BSD LCS %RPD RPD MB Spike LCS LCSD LCSD Limits Units Analysis

Parameter Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 259 104 260 90-110 0 20 12.22.2020 12:50 104 mg/kg

Analytical Method: Chloride by EPA 300

E300P Prep Method: 3146061 12.22.2020 Seq Number: Matrix: Soil Date Prep:

MS Sample Id: 682134-001 S MSD Sample Id: 682134-001 SD Parent Sample Id: 682134-001

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec Result %Rec Limit Date 20 12.22.2020 13:08 Chloride 176 200 391 108 389 107 90-110 mg/kg



Chain of Custody

Work Order No: 48 2134

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334

| - | The state of the s | Midland, IX (432-704-5440) | Midland, IX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296 | | |
|---------------------------|--|----------------------------------|---|---|-----------|
| Project Manager: Dan Moir | | Bill to: Froenix,AZ (| Bill to: (213-522-1900) Pridenty, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000) | 620-2000) www.xenco.com Page | of |
| | T WOI | Bill to: (if different) | Kyle Littrell | Work Order C | |
| Company Name: | Company Name: WSP USA Inc. Permian office | | | Work Order Comments | |
| | | Company Name: X10 Energy | | Program: ST/DST BD | |
| Address: | 3300 North A Street | Address: | | Dispersion of the prominers of the Sperfund | * perfund |
| | | , mail 0000. | OZZ AASZI MELLIOUG | State of Project: | |
| City, State ZIP: | Midland, Ix 79705 | City State 7IP | Carlehad NIM 80000 | | |
| Phone: | (100) | 1 | Calistian, INIVI 00220 | Reporting:Level III Level III ST/UST RP Byel IV | Tevel IV |
| i noire. | (432) 236-3849 | Email: enaka@itenu com denai@ite | | | |

| (10c) 200-00#8 | (432) 236-3840 | Midland, Tx 79705 | | 3300 North A Street | | WSP USA Inc, Permian office | | Dan Moir | | HOP | AND THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSONS ASSESSMENT OF THE PERSON NAMED IN COLUMN TWO PERSON N |
|---|----------------------------|--------------------------------------|---------------------|---------------------|--------------------------------------|-----------------------------|---------------------|-------------------------|---|--|--|
| Email: enaka@ltenv.com. dmoir@ltenv.com | | City, State ZIP: Carlsbad, NM 88220 | ozz vvest iviermond | Address: | Company Marile: ATO Energy | Company Namo: | Nyle Littlell | Bill to: (if different) | Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000) | he NM (676 200 7660) 11 (000)/ 34-1230 | """""""""""""""""""""""""""""""""""""" |
| Deliverables: EDD | Gver III BIZOT RE LEVEL IV | Reporting Level II Testilist Table 1 | State of Project: | | Program: UST/PST TRP Troumfields TBC | Commence Commence | Work Order Comments | www.xellco.com age of | WWW YORKS COM | (000)1 24-120 | 19061704 4000 |

| Project Name: | Solary SWD Pigg | Turn Around | 2.22 | Oliei: |
|--|--|---|--|---|
| Project Number: | 16012420091 | Routine | ANALYSIS REQUEST | Work Order Notes |
| P.O. Number: | Eddy County | Rush: | | |
| Sampler's Name: | Elizabeth Naka | Due Date: | | |
| SAMPLE RECEIPT | Temp Blank: Yes No | Wet Ices Yes No | | |
| Temperature (°C): | | (8 | ers | |
| Received Intact: | No | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |) | |
| Cooler Custody Seals: | O N/A | actor 17 | 5) 8021 | |
| Sample Custody Seals: | No) N/A | | 801 A 0= | TAT starts the day recevied by the |
| Sample Identification | Matrix Date | | (EPA | lab, if received by 4:30pm |
| CP (V) | paidined | bled | ТРІ ВТІ | Sample Comments |
| 00000 | 0160 02112/11 5 | 0'-4' | | 4,30 |
| C 25 (11) | 09 K | | | Confession |
| 11111 | 27.0 | | | |
| L'C MS | 0828 | V. | | |
| 2003 | 1025 | - | | |
| SW UH | 0000 | | | |
| 24 ms | 17.30 | 0 | | |
| 14 ms | 12.35 | 2 | | |
| Sw 36 | 1370 | 0 | | |
| 2m 24 | W 1 1325 | 5 | | |
| Total 200.7 / 6010 Circle Method(s) and | Total 200.7 / 6010 200.8 / 6020: 8RCRA Circle Method(s) and Metal(s) to be analyzed TCLP / | 8RCRA 13PPM Texas 11 A | 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 |
| enco. A minimum charge of | ant and relinquishment of samples constitutes a vainly for the cost of samples and shall not assume a \$75.00 will be applied to each project and a charge | lid purchase order from my responsibility for an of \$5 for each sample s | user: 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 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 service 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 newtone to control. | tions |
| Relinquished by: (Signature) | nature) Received by: (Signature) | nature) | Date/Time Relinquished by: (Signature) | Received by: (Signature) Date/Time |
| Confinence 100 | in clee (utto | | 12.21.26 16432 | |
| | | | 4 | |

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 12.21.2020 04.43.00 PM

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Work Order #: 682134 Temperature Measuring device used : T_NM_007

| | 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 contain | ner/ 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 relinquish | ned/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | abels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers. |
| #13 Samples properly preserved? | | Yes | |
| #14 Sample container(s) intact? | | Yes | |
| #15 Sufficient sample amount for indicated to | est(s)? | Yes | |
| #16 All samples received within hold time? | | Yes | |
| #17 Subcontract of sample(s)? | | No | |
| #18 Water VOC samples have zero headsp | ace? | N/A | |

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

Checklist completed by:

Cloe Clifton

Checklist reviewed by:

Date: 12.21.2020

Date: 12.22.2020

PH Device/Lot#:

Analyst:

eurofins Environment Testing

Certificate of Analysis Summary 682314

WSP USA, Dallas, TX

Project Name: Wolverine SWD Riser

Project Id:

TE012920094

Date Received in Lab: Tue 12.22.2020 16:30

Contact:

Dan Moir

Report Date: 12.29.2020 11:46

Project Location:

Eddy County, New Mexico

Project Manager: Jessica Kramer

| | Lab Id: | 682314-0 | 01 | 682314-002 | | 682314-003 | | 682314-004 | | 682314-005 | | 682314-006 | | |
|---------------------|--|------------------|-------|------------------|------|--------------|------------------|------------|------------------|------------|------------------|--------------|------|--|
| Analysis Requested | Field Id: | SW32 | SW32 | | SW33 | | SW28 | | SW29 | | SW18 | | SW90 | |
| Anatysis Requested | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | |
| | Sampled: | 12.22.2020 13:30 | | 12.22.2020 13:35 | | 4:05 | 12.22.2020 14:10 | | 12.22.2020 14:40 | | 12.22.2020 14:45 | | | |
| Chloride by EPA 300 | Chloride by EPA 300 Extracted: 12.28.2020 11 | | 11:46 | 12.28.2020 1 | 1:46 | 12.28.2020 1 | 1:46 | 12.28.2020 | 1:46 | 12.28.2020 | 11:46 | 12.28.2020 1 | 1:46 | |
| | Analyzed: | 12.28.2020 14:06 | | 12.28.2020 1 | 4:24 | 12.28.2020 1 | 4:30 | 12.28.2020 | 4:48 | 12.28.2020 | 14:54 | 12.28.2020 1 | 5:00 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | |
| Chloride | | 393 | 9.96 | 393 | 9.92 | 73.2 | 9.96 | 94.5 | 9.98 | 21.2 | 10.0 | 21.8 | 9.94 | |

BRL - Below Reporting Limit

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

Jessica Vramer

eurofins Environment Testing

Certificate of Analysis Summary 682314

WSP USA, Dallas, TX

Project Name: Wolverine SWD Riser

Project Id:

TE012920094

Date Received in Lab: Tue 12.22.2020 16:30

Page 391 of 520

Contact:

Dan Moir

Report Date: 12.29.2020 11:46

Project Location:

Eddy County, New Mexico

Project Manager: Jessica Kramer

| | Lab Id: | 682314-007 | | | |
|--------------------------------|-----------|------------------|--|--|--|
| Analysis Requested | Field Id: | SW07 | | | |
| Anaiysis Requesieu | Depth: | 0-4 ft | | | |
| | Matrix: | SOIL | | | |
| | Sampled: | 12.22.2020 14:50 | | | |
| Chloride by EPA 300 Extracted: | | 12.28.2020 11:46 | | | |
| Analyzed: | | 12.28.2020 15:06 | | | |
| Units/RL: | | mg/kg RL | | | |
| Chloride | | 20.1 9.98 | | | |

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 682314

for

WSP USA

Project Manager: Dan Moir

Wolverine SWD Riser TE012920094 12.29.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



12.29.2020

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 682314

Wolverine SWD Riser

Project Address: Eddy County, New Mexico

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 682314. 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 Eurofins Xenco, LLC. 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. 682314 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 Eurofins Xenco, LLC 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

Jessica Vermer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 682314

WSP USA, Dallas, TX

Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW32 | S | 12.22.2020 13:30 | 0 - 4 ft | 682314-001 |
| SW33 | S | 12.22.2020 13:35 | 0 - 4 ft | 682314-002 |
| SW28 | S | 12.22.2020 14:05 | 0 - 4 ft | 682314-003 |
| SW29 | S | 12.22.2020 14:10 | 0 - 4 ft | 682314-004 |
| SW18 | S | 12.22.2020 14:40 | 0 - 4 ft | 682314-005 |
| SW90 | S | 12.22.2020 14:45 | 0 - 4 ft | 682314-006 |
| SW07 | S | 12.22.2020 14:50 | 0 - 4 ft | 682314-007 |

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA

Project Name: Wolverine SWD Riser

 Project ID:
 TE012920094
 Report Date:
 12.29.2020

 Work Order Number(s):
 682314
 Date Received:
 12.22.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW32 Matrix: Soil Date Received:12.22.2020 16:30

Lab Sample Id: 682314-001 Date Collected: 12.22.2020 13:30 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 393 | 9.96 | mg/kg | 12.28.2020 14:06 | | 1 | _ |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW33 Matrix: Soil Date Received:12.22.2020 16:30

Lab Sample Id: 682314-002 Date Collected: 12.22.2020 13:35 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 393 | 9.92 | mg/kg | 12.28.2020 14:24 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW28 Matrix: Soil Date Received:12.22.2020 16:30

Lab Sample Id: 682314-003 Date Collected: 12.22.2020 14:05 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 73.2 | 9.96 | mg/kg | 12.28.2020 14:30 | | 1 | _ |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW29 Matrix: Soil Date Received:12.22.2020 16:30

Lab Sample Id: 682314-004 Date Collected: 12.22.2020 14:10 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 94.5 | 9.98 | mg/kg | 12.28.2020 14:48 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW18 Matrix: Soil Date Received:12.22.2020 16:30

Lab Sample Id: 682314-005 Date Collected: 12.22.2020 14:40 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 21.2 | 10.0 | mg/kg | 12.28.2020 14:54 | | 1 | _ |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW90 Matrix: Soil Date Received:12.22.2020 16:30

Lab Sample Id: 682314-006 Date Collected: 12.22.2020 14:45 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 21.8 | 9.94 | mg/kg | 12.28.2020 15:00 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW07 Matrix: Soil Date Received:12.22.2020 16:30

Lab Sample Id: 682314-007 Date Collected: 12.22.2020 14:50 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 20.1 | 9.98 | mg/kg | 12.28.2020 15:06 | | 1 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

Final 1.000

^{**} Surrogate recovered outside laboratory control limit.

Flag

Date

MB Sample Id:

QC Summary 682314

WSP USA

Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

Result

Amount

Result

E300P Prep Method:

Limit

E300P

E300P

3146198 Matrix: Solid Date Prep: Seq Number: 12.28.2020 LCS Sample Id: 7717954-1-BKS LCSD Sample Id: 7717954-1-BSD

LCS RPD MB Spike LCS LCSD Limits %RPD Units Analysis LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date

Chloride <10.0 250 260 104 260 90-110 0 20 12.28.2020 12:30 104 mg/kg

Analytical Method: Chloride by EPA 300

7717954-1-BLK

Prep Method: Seq Number: 3146198 Matrix: Soil Date Prep: 12.28.2020 MS Sample Id: 682305-001 S MSD Sample Id: Parent Sample Id: 682305-001 682305-001 SD

%Rec

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter**

Result

%Rec

20 12.28.2020 12:48 Chloride <9.98 200 206 103 206 104 90-110 0 mg/kg

Analytical Method: Chloride by EPA 300

Prep Method: 3146198 Seq Number: Matrix: Soil Date Prep: 12.28.2020

MS Sample Id: 682314-001 S MSD Sample Id: 682314-001 SD Parent Sample Id: 682314-001

RPD Parent Spike MS MS %RPD Units Analysis MSD **MSD** Limits Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec 12.28.2020 14:12 Chloride 393 200 611 109 90-110 0 20 mg/kg 613 110

| Project Manager: | Dan Moir |
|------------------|-----------------------------|
| Company Name: | WSP USA Inc, Permian office |
| Address: | 3300 North A Stroot |

City, State ZIP:

Midland, Tx 79705

Address: City, State ZIP:

Kyle Littrell

XTO Energy

522 West Mermond

Program: UST/PST State of Project:

Work Order Comments
□RP □rownfields □RC

1 perfund

www.xenco.com

으

Bill to: (if different)
Company Name:

Chain of Custody

Work Order No: 682314

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

| Phone: (4 | H | City, State ZIP: Carlsbad, NM 88220 Email: enaka@ltenv.com, dmoir@ltenv.com | Reporting:Level III |
|--|---|---|---|
| ň | 12094 | ANALYSIS REQUEST | JEST |
| P.O. Number: | Eddy County Rush: | | |
| Sampler's Name: | D . | | |
| SAMPLE RECEIPT | Temp Blank: Yes No Wet Ice | | |
| Temperature (°C): | | rs | |
| Received Intact: | I hermome | | |
| Cooler Custody Seals: | N/A Correction For | 021) | |
| Sample Custody Seals: | 8 | 0f Co 8015) | |
| Sample Identification | Matrix Date Time | mber I (EPA X (EPA | lab, if received by 4:30pm |
| SW32 | S 12/2/20 13 30 71 | Nu TPI BTE | |
| SW33 | 7221 | ~ | - Company |
| 2M 18 | 228 | | |
| N N N | 1410 | | |
| 1 N N 1 8 | 1446 | | |
| 1000 | 5441: | | |
| JW0+ | T 4 1450 1 | - | |
| | | 4 | |
| | | Ships Mark | |
| Total 200.7 / 6010 | | | |
| Circle Method(s) and | Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA | 10: 8RCRA Sb As Ba Be Cd Cr Co Cu Fe Pb Mg Mn Mo I | Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn Ni Se Ag Ti U 1631 / 245 1 / 7470 / 7474 . Lc |
| service. Xenco will be liable on tenco. A minimum charge 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 Xenco. A minimum charge 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 | 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. Reliable to the control of 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. Reliable to the cost of samples and samples and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be expensed. | |
| Switter With | Received by: (Signature) | Date/Time Relinquished by: (Signature) | d by: (Signature) Received by: (Signature) |
| to the second | CAR Charles | | |
| | | A (C | |
| | | o | |

Revised Date 051418 Rev. 2018.1

Page 16 of 17

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 12.22.2020 04.30.00 PM Air and Metal samples Acceptable Range: Ambient

Work Order #: 682314 Temperature Measuring device used : T_NM_007

| Sampl | e 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/ cool | ler? 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/ rece | eived? Yes | |
| #10 Chain of Custody agrees with sample labels/ma | trix? Yes | |
| #11 Container label(s) legible and intact? | Yes | |
| #12 Samples in proper container/ bottle? | Yes | Samples received in bulk containers. |
| #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 completed by:

Cloe Clifton

Checklist reviewed by:

Jessica Kramer

Date: 12.22.2020

Date: 12.28.2020

PH Device/Lot#:

Analyst:

eurofins Environment Testing



Certificate of Analysis Summary 682818

WSP USA, Dallas, TX

Project Name: Wolverine SWD Riser

Project Id:

TE012920091

Date Received in Lab: Tue 12.29.2020 11:19

Contact:

Dan Moir

Report Date: 01.05.2021 11:35

Project Manager: Jessica Kramer

Project Location:

Eddy County, New Mexico

| | Lab Id: | 682818-0 | 01 | 682818-00 |)2 | 682818-0 | 03 | 682818-0 | 04 | 682818-0 | 05 | |
|---------------------|------------|--------------|------------------|------------------|------------------|------------------|-----------------------|------------------|------------------|------------------|-------|--|
| Analysis Requested | Field Id: | SW74 | | SW75 | | SW76 | | SW77 | | SW78 | | |
| Analysis Requesieu | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | |
| | Matrix: | SOIL | SOIL | | SOIL SOIL | | SOIL | | SOIL | | | |
| | Sampled: | 12.28.2020 | 12.28.2020 10:30 | | 12.28.2020 10:35 | | 12.28.2020 14:20 | | 12.28.2020 | 13:20 | | |
| Chloride by EPA 300 | Extracted: | 12.31.2020 (| 08:30 | 12.31.2020 08:30 | | 12.31.2020 08:30 | | 12.31.2020 08:30 | | 12.31.2020 08:30 | | |
| | Analyzed: | 12.31.2020 (| 12.31.2020 09:18 | | 12.31.2020 09:36 | | 12.31.2020 09:42 12.3 | | 12.31.2020 09:48 | | 09:54 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | |
| Chloride | | 70.8 | 9.90 | 69.7 | 9.98 | 58.9 | 9.96 | 54.8 | 9.96 | 290 | 49.6 | |

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 682818

for

WSP USA

Project Manager: Dan Moir

Wolverine SWD Riser TE012920091 01.05.2021

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



01.05.2021

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 682818

Wolverine SWD Riser

Project Address: Eddy County, New Mexico

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 682818. 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 Eurofins Xenco, LLC. 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. 682818 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 Eurofins Xenco, LLC 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

Jessica Vermer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 682818

WSP USA, Dallas, TX

Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW74 | S | 12.28.2020 10:30 | 0 - 4 ft | 682818-001 |
| SW75 | S | 12.28.2020 10:35 | 0 - 4 ft | 682818-002 |
| SW76 | S | 12.28.2020 14:20 | 0 - 4 ft | 682818-003 |
| SW77 | S | 12.28.2020 14:25 | 0 - 4 ft | 682818-004 |
| SW78 | S | 12.28.2020 13:20 | 0 - 4 ft | 682818-005 |

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA

Project Name: Wolverine SWD Riser

 Project ID:
 TE012920091
 Report Date:
 01.05.2021

 Work Order Number(s):
 682818
 Date Received:
 12.29.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW74 Matrix: Soil Date Received:12.29.2020 11:19

Lab Sample Id: 682818-001 Date Collected: 12.28.2020 10:30 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 70.8 | 9.90 | mg/kg | 12.31.2020 09:18 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

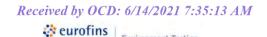
Sample Id: SW75 Matrix: Soil Date Received:12.29.2020 11:19

Lab Sample Id: 682818-002 Date Collected: 12.28.2020 10:35 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|---|
| Chloride | 16887-00-6 | 69.7 | 9.98 | mg/kg | 12.31.2020 09:36 | | 1 | - |



Environment Testing

Certificate of Analytical Results 682818

-

WSP USA, Dallas, TX Wolverine SWD Riser

Sample Id: SW76 Matrix: Soil Date Received:12.29.2020 11:19

Lab Sample Id: 682818-003 Date Collected: 12.28.2020 14:20 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Basis: Wet Weight

Page 414 of 520

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 58.9 | 9.96 | mg/kg | 12.31.2020 09:42 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW77 Matrix: Soil Date Received:12.29.2020 11:19

Lab Sample Id: 682818-004 Date Collected: 12.28.2020 14:25 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 54.8 | 9.96 | mg/kg | 12.31.2020 09:48 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW78 Matrix: Soil Date Received:12.29.2020 11:19

Lab Sample Id: 682818-005 Date Collected: 12.28.2020 13:20 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 290 | 49.6 | mg/kg | 12.31.2020 09:54 | | 5 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

Final 1.000

^{**} Surrogate recovered outside laboratory control limit.

QC Summary 682818

WSP USA

Wolverine SWD Riser

Analytical Method:Chloride by EPA 300Prep Method:E300PSeq Number:3146517Matrix: SolidDate Prep:12.31.2020

MB Sample Id: 7718218-1-BLK LCS Sample Id: 7718218-1-BKS LCSD Sample Id: 7718218-1-BSD

LCS RPD MB Spike LCS LCSD Limits %RPD Units Analysis LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 251 100 253 90-110 20 12.31.2020 09:06 101 1 mg/kg

Analytical Method: Chloride by EPA 300 Prep Method: E300P

 Seq Number:
 3146517
 Matrix:
 Soil
 Date Prep:
 12.31.2020

 Parent Sample Id:
 682818-001
 MS Sample Id:
 682818-001 S
 MSD Sample Id:
 682818-001 SD

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result 70.8 20 12.31.2020 09:24 Chloride 199 275 103 275 103 90-110 0 mg/kg

Analytical Method:Chloride by EPA 300Prep Method:E300PSeq Number:3146517Matrix: SoilDate Prep:12.31.2020

Parent Sample Id: 683014-001 MS Sample Id: 683014-001 S MSD Sample Id: 683014-001 SD

%RPD **RPD Parent** Spike MS MS Units Analysis MSD **MSD** Limits Flag **Parameter** Result Result %Rec Limit Date Amount Result %Rec 12.31.2020 10:48 Chloride 105 200 295 95 293 94 90-110 20 mg/kg 1

Phone:

(432) 236-3849 Midland, Tx 79705

Project Number

Project Name:

Wolverize SWD

1:se

Email: enaka@ltenv.com, dmoir@lte

Carlsbad

TE01292009

Routine

Turn Around

Address:

Project Manager:

Dan Moir

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900)

Bill to: (if different) Company Name:

Kyle Littre

Houston, TX (281) 240-4200 Dallas, TX (214

Chain

Midland, TX (432-704-5440) EL Paso, TX (

Company Name:

WSP USA Inc, Permian office

3300 North A Street

Address: City, State ZIP:

> 522 West XTO Ener

City, State ZIP:

The stoice: 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 Xenco. A minimum charge 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. Received by OCD Sample Custody Seals: P.O. Number: Received Intact: Sampler's Name: Relinquished by: (Signature) emperature (°C): SAMPLE RECEIPT ooler Custody Seals: Total 200.7 / 6010 Circle Method(s) and Metal(s) to be analyzed Sample Identification 87 mS 5W77 92.05 54 ms TT MS 200.8 / 6020: Yes Yes Temp Blank: É No Elizabeth Naka **Eddy County** 0 No Matrix NA NA Received/by: (Signature) 1229120 Sampled Yes Date Correction Factor: No Total Containers: 8RCRA 13PPM Texas 11 Al TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Thermometer ID 1030 58 W Sampled 1425 22 132 Time Wet Ice: Yes 2/8/1 Rush: Due Date: 10 14-10 Depth 4 No **Number of Containers** 79.20 Sb As Ba Be B Cd Ca Cr Co Cu Date/Time 100 TPH (EPA 8015) BTEX (EPA 0=8021) 0 Chloride (EPA 300.0) Relinquished by: (Signature) Fe Pb Mg M Mo Ni Received by: (Signature) K Se Ag SiO2 Na Sr TI Sn U V 1631 / 245.1 / 7470 / 7471 : Hg

| ANALYSIS REQUEST Work Order Notes | |
|-----------------------------------|--|
| JST [] | 220 |
| State of Project: | Mermond State |
| Work Order Comments | |
| o-2000) www.xenco.com Page | 915)585-3443 Lubbock,TX (806)794-1296 Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) |
| 8 | 902-0300 San Antonio,TX (210) 509-3334 |

Zn

Date/Time

Revised Date 051418 Rev. 2018.

Sample Comments

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

the

Composite

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 12.29.2020 11.19.00 AM Air and Metal samples Acceptable Range: Ambient

Work Order #: 682818 Temperature Measuring device used : T_NM_007

| | 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 contai | ner/ 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 relinquish | ned/ received? | Yes | |
| #10 Chain of Custody agrees with sample la | abels/matrix? | Yes | |
| #11 Container label(s) legible and intact? | | Yes | |
| #12 Samples in proper container/ bottle? | | Yes | Samples received in bulk containers. |
| #13 Samples properly preserved? | | Yes | 00.110.10. |
| #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 headsp | ace? | N/A | |

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

Checklist completed by:

Cloe Clifton

Checklist reviewed by:

Jessica Warner

Date: 12.29.2020

Date: 12.30.2020

PH Device/Lot#:

Analyst:

Certificate of Analysis Summary 683106 WSP USA, Dallas, TX

eurofins Environment Testing

Contact:

Project Location:

Project Name: Wolverine SWD Riser

Project Id: TE012920091 **Date Received in Lab:** Wed 12.30.2020 16:55

Report Date: 01.05.2021 14:16 Dan Moir Eddy County, NM

Project Manager: Jessica Kramer

| | Lab Id: | 683106-00 | 01 | 683106-00 | 02 | 683106-00 |)3 | 683106-0 | 04 | 683106-0 | 05 | 683106-00 |)6 |
|---------------------|------------|--------------|------------------|------------------|-------|------------------|------|------------------|-------|------------------|-------|------------------|-------|
| Analysis Requested | Field Id: | SW63 | | SW64 | | SW65 | | SW66 | | SW67 | | SW68 | |
| Analysis Requesieu | Depth: | 0-4 ft | | 0-4 ft 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | |
| | Matrix: | SOIL | SOIL | | | SOIL | | SOIL | | SOIL | | SOIL | |
| | Sampled: | 12.30.2020 | 12.30.2020 14:35 | | 13:50 | 12.30.2020 11:05 | | 12.30.2020 13:30 | | 12.30.2020 10:30 | | 12.30.2020 09:55 | |
| Chloride by EPA 300 | Extracted: | 12.31.2020 | 15:08 | 12.31.2020 15:08 | | 12.31.2020 15:08 | | 12.31.2020 | 15:08 | 12.31.2020 | 15:08 | 12.31.2020 1 | 5:08 |
| | Analyzed: | 01.01.2021 (| 00:47 | 01.01.2021 (| 01:05 | 01.01.2021 | 1:11 | 01.01.2021 (| 01:17 | 01.01.2021 | 01:23 | 01.01.2021 | 01:41 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 95.2 | 10.0 | 21.8 | 9.92 | 37.7 | 10.0 | 196 | 9.96 | 40.0 | 9.92 | 160 | 10.1 |

BRL - Below Reporting Limit

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

Jessica Weamer

Dan Moir

Eddy County, NM

eurofins Environment Testing

Project Id:

Project Location:

Contact:

Certificate of Analysis Summary 683106

WSP USA, Dallas, TX

Project Name: Wolverine SWD Riser TE012920091

Date Received in Lab: Wed 12.30.2020 16:55

Report Date: 01.05.2021 14:16

Project Manager: Jessica Kramer

| | Lab Id: | 683106-0 | 07 | 683106-00 | 08 | 683106-00 |)9 | | |
|---------------------|------------|------------|------------------|------------------|------------------|------------------|-------|--|--|
| Analysis Requested | Field Id: | SW69 | | SW23 | | SW24 | | | |
| Analysis Requesieu | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | | |
| | Matrix: | SOIL | SOIL | | | SOIL | | | |
| | Sampled: | 12.30.2020 | 12.30.2020 09:50 | | 12.30.2020 12:40 | | 2:45 | | |
| Chloride by EPA 300 | Extracted: | 12.31.2020 | 15:08 | 12.31.2020 15:08 | | 12.31.2020 15:08 | | | |
| | Analyzed: | 01.01.2021 | 01:47 | 01.01.2021 (|)1:53 | 01.01.2021 (|)1:59 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | | |
| Chloride | | 203 | 9.96 | 116 | 9.90 | 111 | 9.92 | | |

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 683106

for

WSP USA

Project Manager: Dan Moir

Wolverine SWD Riser TE012920091 01.05.2021

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



01.05.2021

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 683106

Wolverine SWD Riser

Project Address: Eddy County, NM

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 683106. 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 Eurofins Xenco, LLC. 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. 683106 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 Eurofins Xenco, LLC 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

Jessica Vermer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 683106

WSP USA, Dallas, TX

Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW63 | S | 12.30.2020 14:35 | 0 - 4 ft | 683106-001 |
| SW64 | S | 12.30.2020 13:50 | 0 - 4 ft | 683106-002 |
| SW65 | S | 12.30.2020 11:05 | 0 - 4 ft | 683106-003 |
| SW66 | S | 12.30.2020 13:30 | 0 - 4 ft | 683106-004 |
| SW67 | S | 12.30.2020 10:30 | 0 - 4 ft | 683106-005 |
| SW68 | S | 12.30.2020 09:55 | 0 - 4 ft | 683106-006 |
| SW69 | S | 12.30.2020 09:50 | 0 - 4 ft | 683106-007 |
| SW23 | S | 12.30.2020 12:40 | 0 - 4 ft | 683106-008 |
| SW24 | S | 12.30.2020 12:45 | 0 - 4 ft | 683106-009 |

Page 426 of 520

CASE NARRATIVE

💸 eurofins **Environment Testing** Xenco

Client Name: WSP USA

Project Name: Wolverine SWD Riser

Project ID: Report Date: 01.05.2021 TE012920091 Work Order Number(s): 683106 Date Received: 12.30.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW63 Matrix: Soil Date Received:12.30.2020 16:55

Lab Sample Id: 683106-001 Date Collected: 12.30.2020 14:35 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 95.2 | 10.0 | mg/kg | 01.01.2021 00:47 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW64 Matrix: Soil Date Received:12.30.2020 16:55

Lab Sample Id: 683106-002 Date Collected: 12.30.2020 13:50 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 21.8 | 9.92 | mg/kg | 01.01.2021 01:05 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW65 Matrix: Soil Date Received:12.30.2020 16:55

Lab Sample Id: 683106-003 Date Collected: 12.30.2020 11:05 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 37.7 | 10.0 | mg/kg | 01.01.2021 01:11 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: **SW66** Matrix: Soil Date Received:12.30.2020 16:55

Lab Sample Id: 683106-004 Date Collected: 12.30.2020 13:30 Sample Depth: 0 - 4 ft

Prep Method: E300P

Analytical Method: Chloride by EPA 300

MAB Tech: % Moisture: MAB Analyst: 12.31.2020 15:08

Date Prep: Basis: Wet Weight Seq Number: 3146546

Result **Parameter** Cas Number RLUnits **Analysis Date** Dil Flag Chloride 16887-00-6 196 01.01.2021 01:17 9.96 mg/kg



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW67 Matrix: Soil Date Received:12.30.2020 16:55

Lab Sample Id: 683106-005 Date Collected: 12.30.2020 10:30 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 40.0 | 9.92 | mg/kg | 01.01.2021 01:23 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW68 Matrix: Soil Date Received:12.30.2020 16:55

Lab Sample Id: 683106-006 Date Collected: 12.30.2020 09:55 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep M

Prep Method: E300P

Tech: MAB

Analyst: MAB

Seq Number: 3146546

Date Prep: 12.31.2020 15:08

% Moisture:

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 160 | 10.1 | mg/kg | 01.01.2021 01:41 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW69 Matrix: Soil Date Received:12.30.2020 16:55

Lab Sample Id: 683106-007 Date Collected: 12.30.2020 09:50 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 203 | 9.96 | mg/kg | 01.01.2021 01:47 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW23 Matrix: Soil Date Received:12.30.2020 16:55

Lab Sample Id: 683106-008 Date Collected: 12.30.2020 12:40 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 116 | 9.90 | mg/kg | 01.01.2021 01:53 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW24 Matrix: Soil

Date Collected: 12.30.2020 12:45 Sample Depth: 0 - 4 ft

Prep Method: E300P

Date Received:12.30.2020 16:55

Analytical Method: Chloride by EPA 300

Tech: MAB

Seq Number: 3146546

Lab Sample Id: 683106-009

Analyst: MAB

Date Prep: 12.31.2020 15:08 % Mo

% Moisture:

Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 111 | 9.92 | mg/kg | 01.01.2021 01:59 | | 1 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

^{**} Surrogate recovered outside laboratory control limit.

mg/kg

Prep Method:

Analytical Method: Chloride by EPA 300

QC Summary 683106

WSP USA

Wolverine SWD Riser

E300P Analytical Method: Chloride by EPA 300 Prep Method: Date Prep: Seq Number: 3146546 Matrix: Solid 12.31.2020

7718260-1-BLK LCS Sample Id: 7718260-1-BKS LCSD Sample Id: 7718260-1-BSD MB Sample Id:

LCS RPD MB Spike LCS LCSD Limits %RPD Units Analysis LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 254 102 254 102 90-110 0 20 01.01.2021 00:35

E300P

Seq Number: 3146546 Matrix: Soil Date Prep: 12.31.2020 MS Sample Id: 683106-001 S MSD Sample Id: Parent Sample Id: 683106-001 683106-001 SD

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result 20 01.01.2021 00:53 Chloride 95.2 201 288 96 310 106 90-110 7 mg/kg

E300P Analytical Method: Chloride by EPA 300 Prep Method:

Seq Number: 3146546 Matrix: Soil Date Prep: 12.31.2020 MS Sample Id: 683140-002 S MSD Sample Id: 683140-002 SD Parent Sample Id: 683140-002

%RPD **RPD Parent** Spike MS MS Units Analysis MSD **MSD** Limits Flag **Parameter** Result Result %Rec Limit Date Amount Result %Rec Chloride 62.1 200 257 97 252 95 90-110 2 20 mg/kg 01.01.2021 02:17

| Page | 120 | _ | £ = 1 |
|------|------|----------|-------|
| Page | 4.30 | α | 1 32 |
| | | | |

| | | 9 | | | | | |
|---|--|--|---|--|---|---------------------------------------|--|
| | | 4 | | | 4 | | |
| | | 2 | 12/30/20 12:55 | | C | $\overline{\wedge}$ | Well It |
| Date/Time | Received by: (Signature) | Relinquished by: (Signature) | Date/Time | nature) | Received by: (Signature) | | quished by: (Signature) |
| | the control | e. 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 e. 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 e. Xenco, but not analyzed. These terms will be enforced unless previously negotiated. | or expenses incurred by the clied to Xenco, but not analyzed. The | sponsibility for any losses for each sample submitte | nd shall not assume any re project and a charge of \$1 | ne cost of samples an | e. Xenco will be liable only for t A minimum charge of \$75.00 v |
| | conditions | singer 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 | ompany to Xenco, its affiliates an | rchase order from client o | ples constitutes a valid pu | elinguishment of sam | ignature of this document and r |
| 1 Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : H | Ni K Se Ag SiO2 Na | 8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn MoTCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U | 11 Al Sb As Ba Be I A Sb As Ba Be Cd C | RA 13PPM Texas 11 SPLP 6010: 8RCRA S | | 200.8 / 6020: Metal(s) to be analy | otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed |
| | | My por May | | 1 | | | |
| , | - | 2441 | 4 | 5 | V 1245 | < | 50074 |
| | | | | 0 | 1240 | | 5M23 |
| | | | | Ċ | 0950 | | 5m69 |
| | | | | 3 | 0955 | | 80WS |
| | | | | 0 | 103 | | 5 W67 |
| | | | | 30 | 133 | | SW66 |
| | | | | 5 | 5011 | | 50 WS |
| | | | | 0 | 135 | | H9MS |
| collection. | | | × | 200-4 | 1470/20 1925 | 5 | SW63 |
| 4.5000 | | | C | De | 100 | Matrix | Sample Identification |
| Sample Comments | | | alor | | Date Time | - | 11 |
| received by 4.00pm | | | | | Total Containers: | | |
| TAT starts the day recevied by the | TAT | | | 1 | Correction Factor: | N/A N/A | oler Custody Seals: Yes |
| Zn Acetate+ NaOn, Zii | 277 | | | 97 | THIMOOT | Yes No | Received Intact: |
| NaOH: Na | Z Z | | | eter ID | Thermometer ID | 8:010 | Temperature (°C): |
| HCL: HC | HO | | | Ice: Yes No | (Yes No Wet Ice: | Temp Blank: | E RECEIPT |
| | | | .0) | | Quote #: | | PO#: |
| H2S04: H2 | H20 | | | Due Date: | D | beth Nak | m |
| None: NO | Non | | | Rush: | NM | County , | ject Location Eddy |
| MeOH: Me | Med | | Code | Routine X | R | 16012920091 | |
| Fleservauve codes | | ANALYSIS REQUEST | Pros | Turn Around | Riser | THE SWD | roject Name: Wolverine |
| | Deliverables, EDO L | dimo: 1 (a) tear, com Della | EWSp.com, | Email: elizabeth. 14 Fa | En | b488 | Phone: (432) 3849 |
| Other: | Julig.Level II. Level III. D. 2000 | W Bacco | Carkbad, A | City, State ZIP: | 79705 | TX | ty, State ZIP: Midland |
| T TRRP TI Level IV | State of Fioject. | Duous And | 152m 77G | Address: | A Street | North 6 | Address: 3300 |
| ds RRC Superrund | Program: UST/PST PRP Brownfields RRC Superfund | | XTO | Company Name: | | SA Inc | npany Name: USP |
| ments | Work Order Comments | | Lyle | Bill to: (if different) | | Moir | ect Manager: Dan |
| | | Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Pairit Beaddi, FL (301) 600-2101 | 0) 449-8800 Tampa,FL (813) | 55-0900 Atlanta,GA (77 | Phoenix,AZ (480) | | |
| Page f of (| WWW XANCO COM | | 00 Dallas,TX (214) 902-0300 S ((915) 585-3443 Lubbock,TX (| ouston,TX (281) 240-420 2) 704-5440 EL Paso,T) | H Midland,TX (43 | ABORATORIES | LABORA |
| 683100 | Work Order No: | stody | Chain of Custody | | | 5 | くに |
| 1 | | | | | | | |

eurofins Environment Testing

Certificate of Analysis Summary 683140

WSP USA, Dallas, TX

Project Name: Wolverine SWD Riser

Project Id:

Project Location:

Contact:

TE012920091

Dan Moir

Eddy County, NM

Date Received in Lab: Thu 12.31.2020 12:50

Report Date: 01.08.2021 10:54

Project Manager: Jessica Kramer

| | Lab Id: | 683140-00 | 01 | 683140-00 | 02 | 683140-0 | 03 | 683140-00 |)4 | 683140-0 | 05 | 683140-00 | 06 |
|---------------------|------------|--------------|-------|--------------|-------|------------|-------|--------------|-------|------------|-------|--------------|-------|
| Analysis Requested | Field Id: | SW91 | | SW92 | | SW93 | | SW94 | | SW95 | | SW96 | |
| Anatysis Requested | Depth: | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | Sampled: | 12.31.2020 (|)9:45 | 12.31.2020 | 10:20 | 12.31.2020 | 10:25 | 12.31.2020 | 0:30 | 12.31.2020 | 10:35 | 12.31.2020 1 | 11:05 |
| Chloride by EPA 300 | Extracted: | 12.31.2020 | 15:08 | 12.31.2020 | 15:08 | 12.31.2020 | 15:08 | 12.31.2020 | 5:08 | 12.31.2020 | 15:08 | 12.31.2020 1 | 15:08 |
| | Analyzed: | 01.01.2021 (|)2:05 | 01.01.2021 (|)2:11 | 01.01.2021 |)2:29 | 01.01.2021 (|)2:35 | 01.01.2021 | 02:53 | 01.01.2021 |)2:59 |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 36.9 | 10.0 | 62.1 | 9.96 | 71.7 | 9.98 | 58.2 | 10.0 | 37.6 | 10.0 | 18.8 | 9.98 |

BRL - Below Reporting Limit

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

Jessica Weamer

eurofins Environment Testing

Certificate of Analysis Summary 683140

WSP USA, Dallas, TX

Project Name: Wolverine SWD Riser

Project Id:

Project Location:

TE012920091

Eddy County, NM

Date Received in Lab: Thu 12.31.2020 12:50

Contact:

Dan Moir

Report Date: 01.08.2021 10:54

Page 440 of 520

Project Manager: Jessica Kramer

| | Lab Id: | 683140-007 | | | |
|---------------------|------------|------------------|--|--|--|
| Analysis Requested | Field Id: | SW97 | | | |
| Anaiysis Requesieu | Depth: | 0-4 ft | | | |
| | Matrix: | SOIL | | | |
| | Sampled: | 12.31.2020 11:10 | | | |
| Chloride by EPA 300 | Extracted: | 12.31.2020 15:08 | | | |
| | Analyzed: | 01.01.2021 03:05 | | | |
| | Units/RL: | mg/kg RL | | | |
| Chloride | | 111 9.96 | | | |

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 683140

for

WSP USA

Project Manager: Dan Moir

Wolverine SWD Riser TE012920091 01.08.2021

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



01.08.2021

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 683140

Wolverine SWD Riser

Project Address: Eddy County, NM

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 683140. 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 Eurofins Xenco, LLC. 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. 683140 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 Eurofins Xenco, LLC 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

Jessica Vermer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 683140

WSP USA, Dallas, TX

Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW91 | S | 12.31.2020 09:45 | 0 - 4 ft | 683140-001 |
| SW92 | S | 12.31.2020 10:20 | 0 - 4 ft | 683140-002 |
| SW93 | S | 12.31.2020 10:25 | 0 - 4 ft | 683140-003 |
| SW94 | S | 12.31.2020 10:30 | 0 - 4 ft | 683140-004 |
| SW95 | S | 12.31.2020 10:35 | 0 - 4 ft | 683140-005 |
| SW96 | S | 12.31.2020 11:05 | 0 - 4 ft | 683140-006 |
| SW97 | S | 12.31.2020 11:10 | 0 - 4 ft | 683140-007 |

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA

Project Name: Wolverine SWD Riser

 Project ID:
 TE012920091
 Report Date:
 01.08.2021

 Work Order Number(s):
 683140
 Date Received:
 12.31.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW91 Matrix: Soil Date Received:12.31.2020 12:50

Lab Sample Id: 683140-001 Date Collected: 12.31.2020 09:45 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 36.9 | 10.0 | mg/kg | 01.01.2021 02:05 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW92 Matrix: Soil Date Received:12.31.2020 12:50

Lab Sample Id: 683140-002 Date Collected: 12.31.2020 10:20 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 62.1 | 9.96 | mg/kg | 01.01.2021 02:11 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW93 Matrix: Soil Date Received:12.31.2020 12:50

Lab Sample Id: 683140-003 Date Collected: 12.31.2020 10:25 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 71.7 | 9.98 | mg/kg | 01.01.2021 02:29 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW94 Matrix: Soil Date Received:12.31.2020 12:50

Lab Sample Id: 683140-004 Date Collected: 12.31.2020 10:30 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 58.2 | 10.0 | mg/kg | 01.01.2021 02:35 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW95 Matrix: Soil Date Received:12.31.2020 12:50

Lab Sample Id: 683140-005 Date Collected: 12.31.2020 10:35 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 37.6 | 10.0 | mg/kg | 01.01.2021 02:53 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW96 Matrix: Soil Date Received:12.31.2020 12:50

Lab Sample Id: 683140-006 Date Collected: 12.31.2020 11:05 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 18.8 | 9.98 | mg/kg | 01.01.2021 02:59 | | 1 |



WSP USA, Dallas, TX

Wolverine SWD Riser

Sample Id: SW97 Matrix: Soil Date Received:12.31.2020 12:50

Lab Sample Id: 683140-007 Date Collected: 12.31.2020 11:10 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 111 | 9.96 | mg/kg | 01.01.2021 03:05 | | 1 |



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. **ND** Not Detected.

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

MB

Spike



WSP USA

683140

RPD

Units

Analysis

Flag

%RPD

Wolverine SWD Riser

LCSD

LCSD

Limits

Analytical Method:Chloride by EPA 300Prep Method:E300PSeq Number:3146546Matrix:SolidDate Prep:12.31.2020

MB Sample Id: 7718260-1-BLK LCS Sample Id: 7718260-1-BKS LCSD Sample Id: 7718260-1-BSD

LCS

Parameter Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 254 102 254 102 90-110 0 20 01.01.2021 00:35 mg/kg

Analytical Method: Chloride by EPA 300 Prep Method: E300P

LCS

 Seq Number:
 3146546
 Matrix:
 Soil
 Date Prep:
 12.31.2020

 Parent Sample Id:
 683106-001
 MS Sample Id:
 683106-001 S
 MSD Sample Id:
 683106-001 SD

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result 01.01.2021 00:53

Chloride 95.2 201 288 96 310 106 90-110 7 20 mg/kg 01.01.2021 00:53

Analytical Method: Chloride by EPA 300 Prep Method: E300P

 Seq Number:
 3146546
 Matrix:
 Soil
 Date Prep:
 12.31.2020

 Parent Sample Id:
 683140-002
 MS Sample Id:
 683140-002 S
 MSD Sample Id:
 683140-002 SD

%RPD **RPD Parent** Spike MS MS Units Analysis MSD **MSD** Limits Flag **Parameter** Result Result %Rec Limit Date Amount Result %Rec

Chloride 62.1 200 257 97 252 95 90-110 2 20 mg/kg 01.01.2021 02:17

Page 454 of 520

Company Name:

City, State ZIP: Midland

Address:

10 Everyy WEST

br 1shad

N 88759 Mormand

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

Work Order Comments

Page

으

State of Project:

| Project Manager: | X FX |
|------------------|------|
| Dan | |
| No | RA |
| 7 | 20 |
| | m |

Chain of Custody

Work Order No:

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334

| | 1400) 303-0900 | Phoenix A7 (490) 355 000 |
|-----------------------------|---|---|
| Bill to: (if different) Lyk | Auanta, GA (770) 449-8800 Tampa, | 7 (492) 764-5440 EL Paso,TX (915) 585-3443 Lubboc |
| 4tx11 | FL (813) 620-2000 West Palm Beach, FI (561) 6 | bbock,TX (806) 794-1296 Craslbad, NM (432) 704 |
| 00-0101 | 30_6701 | 5440 |

Certificate of Analysis Summary 684049 eurofins Environment Testing WSP USA, Dallas, TX

Project Name: Row 4 Wolverine SWD Riser

Project Id:

Project Location:

TE012920091

Dan Moir **Contact:**

Date Received in Lab: Fri 01.08.2021 16:06

Report Date: 01.12.2021 16:45

Project Manager: Jessica Kramer

| | Lab Id: | 684049-00 |)1 | 684049-00 | 02 | 684049-00 |)3 | 684049-00 |)4 | 684049-0 | 05 | 684049-00 |)6 |
|---------------------|------------|------------------|------------------|--------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------|
| Analysis Requested | Field Id: | SW98 | | SW99 | | SW100 | | SW101 | | SW102 | | SW103 | |
| Anutysis Requested | Depth: | 1-4 ft | 1-4 ft | | 1-4 ft | | 0-4 ft | | 0-4 ft | | 0-4 ft | | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | Sampled: | 01.08.2021 07:56 | | 01.08.2021 (| 08:00 | 01.08.2021 08:03 | | 01.08.2021 08:07 | | 01.08.2021 08:11 | | 01.08.2021 08:14 | |
| Chloride by EPA 300 | Extracted: | 01.11.2021 1 | 01.11.2021 12:00 | | 01.11.2021 12:00 | | 01.11.2021 12:00 | | 01.11.2021 12:00 | | 01.11.2021 12:00 | | |
| | Analyzed: | 01.11.2021 19:51 | | 01.11.2021 2 | 20:09 | 01.11.2021 20:15 | | 01.11.2021 20:21 | | 01.11.2021 20:27 | | 01.11.2021 20:45 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 5210 | 49.5 | 1470 | 49.9 | 73.7 | 9.92 | 47.9 | 9.90 | 214 | 10.0 | 507 | 9.96 |

BRL - Below Reporting Limit

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

Jessica Weamer

Certificate of Analysis Summary 684049 WSP USA, Dallas, TX

eurofins
Environment Testing

Project Name: Row 4 Wolverine SWD Riser

Project Id:

TE012920091

Date Received in Lab: Fri 01.08.2021 16:06

Contact: Dan Moir

Report Date: 01.12.2021 16:45

Project Location:

Project Manager: Jessica Kramer

| | Lab Id: | 684049-00 |)7 | 684049-00 |)8 | 684049-00 |)9 | 684049-0 | 10 | 684049-0 | 11 | 684049-01 | 12 |
|---------------------|------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------|
| Analysis Requested | Field Id: | PH10 | | PH10 A | | SW79 | | SW80 | | PH11 | | PH11 A | |
| Tinulysis Requesicu | Depth: | 0.5- ft | | 4.0- ft | | 0-4 ft | | 0-4 ft | | 3.0- ft | | 4.0- ft | |
| | Matrix: | SOIL | | SOIL | | SOIL SOIL | | | SOIL | | SOIL | | |
| | Sampled: | 01.08.2021 09:33 | | 01.08.2021 09:40 | | 01.08.2021 10:55 | | 01.08.2021 13:01 | | 01.08.2021 13:03 | | | |
| Chloride by EPA 300 | Extracted: | 01.11.2021 1 | 01.11.2021 12:00 | | 01.11.2021 12:00 | | 01.11.2021 12:00 | | 01.11.2021 12:00 | | 01.11.2021 12:00 | | 2:00 |
| | Analyzed: | 01.11.2021 20:51 | | 01.11.2021 2 | 20:57 | 01.11.2021 2 | 21:03 | 01.11.2021 21:09 | | 01.11.2021 21:15 | | 01.11.2021 21:33 | |
| | Units/RL: | mg/kg | RL | mg/kg | RL |
| Chloride | | <10.1 | 10.1 | 11.3 | 10.1 | 37.8 | 10.0 | 201 | 9.90 | 15.3 | 10.0 | 18.0 | 10.0 |

BRL - Below Reporting Limit

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

Jessica Vramer

eurofins Environment Testing

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Certificate of Analysis Summary 684049

WSP USA, Dallas, TX

Project Name: Row 4 Wolverine SWD Riser

Project Id:

TE012920091

Date Received in Lab: Fri 01.08.2021 16:06

Contact:

Dan Moir

Report Date: 01.12.2021 16:45

Project Manager: Jessica Kramer **Project Location:**

| | Lab Id: | 684049-013 | 684049-014 | | |
|---------------------|------------|------------------|------------------|--|--|
| Analysis Requested | Field Id: | PH12 | PH12 A | | |
| Titulysis Requesion | Depth: | 2.0- ft | 4.0- ft | | |
| | Matrix: | SOIL | SOIL | | |
| | Sampled: | 01.08.2021 13:32 | 01.08.2021 13:38 | | |
| Chloride by EPA 300 | Extracted: | 01.11.2021 12:00 | 01.11.2021 12:00 | | |
| | Analyzed: | 01.11.2021 21:51 | 01.11.2021 21:57 | | |
| | Units/RL: | mg/kg RL | mg/kg RL | | |
| Chloride | | 10.1 9.94 | <9.92 9.92 | | |

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 684049

for

WSP USA

Project Manager: Dan Moir

Row 4 Wolverine SWD Riser TE012920091 01.12.2021

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



01.12.2021

Project Manager: Dan Moir

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 684049

Row 4 Wolverine SWD Riser

Project Address:

Dan Moir:

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 Eurofins Xenco, LLC Report Number(s) 684049. 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 Eurofins Xenco, LLC. 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. 684049 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 684049

WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------------|--------------|---------------|
| SW98 | S | 01.08.2021 07:56 | 1 - 4 ft | 684049-001 |
| SW99 | S | 01.08.2021 08:00 | 1 - 4 ft | 684049-002 |
| SW100 | S | 01.08.2021 08:03 | 0 - 4 ft | 684049-003 |
| SW101 | S | 01.08.2021 08:07 | 0 - 4 ft | 684049-004 |
| SW102 | S | 01.08.2021 08:11 | 0 - 4 ft | 684049-005 |
| SW103 | S | 01.08.2021 08:14 | 0 - 4 ft | 684049-006 |
| PH10 | S | 01.08.2021 09:33 | 0.5 ft | 684049-007 |
| PH10 A | S | 01.08.2021 09:40 | 4.0 ft | 684049-008 |
| SW79 | S | 01.08.2021 10:55 | 0 - 4 ft | 684049-009 |
| SW80 | S | 01.08.2021 12:18 | 0 - 4 ft | 684049-010 |
| PH11 | S | 01.08.2021 13:01 | 3.0 ft | 684049-011 |
| PH11 A | S | 01.08.2021 13:03 | 4.0 ft | 684049-012 |
| PH12 | S | 01.08.2021 13:32 | 2.0 ft | 684049-013 |
| PH12 A | S | 01.08.2021 13:38 | 4.0 ft | 684049-014 |

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA

Project Name: Row 4 Wolverine SWD Riser

 Project ID:
 TE012920091
 Report Date:
 01.12.2021

 Work Order Number(s):
 684049
 Date Received:
 01.08.2021

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW98 Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-001 Date Collected: 01.08.2021 07:56 Sample Depth: 1 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 5210 | 49.5 | mg/kg | 01.11.2021 19:51 | | 5 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW99 Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-002 Date Collected: 01.08.2021 08:00 Sample Depth: 1 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil | |
|-----------|------------|--------|------|-------|------------------|------|-----|--|
| Chloride | 16887-00-6 | 1470 | 49.9 | mg/kg | 01.11.2021 20:09 | | 5 | |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW100 Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-003 Date Collected: 01.08.2021 08:03 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 73.7 | 9.92 | mg/kg | 01.11.2021 20:15 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW101 Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-004 Date Collected: 01.08.2021 08:07 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 01.11.2021 12:00 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 47.9 | 9.90 | mg/kg | 01.11.2021 20:21 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW102 Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-005 Date Collected: 01.08.2021 08:11 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 01.11.2021 12:00 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 214 | 10.0 | mg/kg | 01.11.2021 20:27 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW103 Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-006 Date Collected: 01.08.2021 08:14 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 507 | 9.96 | mg/kg | 01.11.2021 20:45 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: PH10 Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-007 Date Collected: 01.08.2021 09:33 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 01.11.2021 12:00 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | <10.1 | 10.1 | mg/kg | 01.11.2021 20:51 | U | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: PH10 A Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-008 Date Collected: 01.08.2021 09:40 Sample Depth: 4.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 01.11.2021 12:00 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 11.3 | 10.1 | mg/kg | 01.11.2021 20:57 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW79 Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-009 Date Collected: 01.08.2021 10:55 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 37.8 | 10.0 | mg/kg | 01.11.2021 21:03 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: SW80 Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-010 Date Collected: 01.08.2021 12:18 Sample Depth: 0 - 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 201 | 9.90 | mg/kg | 01.11.2021 21:09 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: PH11 Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-011 Date Collected: 01.08.2021 13:01 Sample Depth: 3.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 15.3 | 10.0 | mg/kg | 01.11.2021 21:15 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: PH11 A Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-012 Date Collected: 01.08.2021 13:03 Sample Depth: 4.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 18.0 | 10.0 | mg/kg | 01.11.2021 21:33 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: PH12 Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-013 Date Collected: 01.08.2021 13:32 Sample Depth: 2.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | 10.1 | 9.94 | mg/kg | 01.11.2021 21:51 | | 1 |



WSP USA, Dallas, TX

Row 4 Wolverine SWD Riser

Sample Id: PH12 A Matrix: Soil Date Received:01.08.2021 16:06

Lab Sample Id: 684049-014 Date Collected: 01.08.2021 13:38 Sample Depth: 4.0 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 01.11.2021 12:00 % Moisture: Basis: Wet Weight

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride | 16887-00-6 | <9.92 | 9.92 | mg/kg | 01.11.2021 21:57 | U | 1 |



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.

BRL Below Reporting Limit. **ND** Not Detected.

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

^{**} Surrogate recovered outside laboratory control limit.

E300P

E300P

Units

RPD

%RPD

Limits

QC Summary 684049

WSP USA

Row 4 Wolverine SWD Riser

Analytical Method: Chloride by EPA 300

MB

Prep Method: Date Prep: Seq Number: 3147501 Matrix: Solid 01.11.2021

LCS

7718893-1-BLK LCS Sample Id: 7718893-1-BKS LCSD Sample Id: 7718893-1-BSD MB Sample Id: LCS

Spike LCSD Analysis LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 256 102 258 90-110 20 01.11.2021 19:40 103 1 mg/kg

Analytical Method: Chloride by EPA 300

E300P Prep Method: Seq Number: 3147501 Matrix: Soil Date Prep: 01.11.2021 MS Sample Id: 684049-001 S MSD Sample Id: 684049-001 SD Parent Sample Id: 684049-001

Parent Spike MS MS MSD **MSD** Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result

20 01.11.2021 19:57 Chloride 5210 200 5410 100 5410 99 90-110 0 mg/kg

Analytical Method: Chloride by EPA 300

Prep Method: Seq Number: 3147501 01.11.2021 Matrix: Soil Date Prep:

MS Sample Id: 684049-011 S MSD Sample Id: 684049-011 SD Parent Sample Id: 684049-011

%RPD **RPD** Parent Spike MS MS Units Analysis MSD **MSD** Limits Flag **Parameter** Result Result %Rec Limit Date Amount Result %Rec 01.11.2021 21:21 Chloride 15.3 199 100 90-110 0 20 mg/kg 214 215 100

City, State ZIP:

Midland, TX 79705

3300 North A Street

Address:

522 W. Mermod St XTO Energy

Program: UST/PST State of Project:

> □RP □rownfields □RC Work Order Comments

1 perfund

www.xenco.com

of

Company Name:

Company Name:

WSP USA

| Pag | e 478 | of 520 |
|---------|-------|--------|
| Project | 4 | 1 |

Manager: Dan Moir

> 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

Chain of Custody

Work Order No: 10 84049

Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) Bill to: (if different) Kyle Littrell

| Phone: (43 | (432) 236-3849 | | mail: Jeremy.Hill@ | Email: Jeremy.Hill@wsp.com, Dan.Mojr@wsp.com | Deliverables: FDD ADSBT I | |
|--|--|---|---|---|--|---|
| Project Name: | Row 41 Walrane | SWB BISA | Turn Around | AN | | |
| Project Number: | - | - | Routine 🖪 | ANAL GO REGORD | | Work Order Notes |
| P.O. Number: | 6/1/30 | sp.11 olit | Rush: | | | |
| Sampler's Name: | Jeremy Hill | | Due Date: | | | |
| SAMPLE RECEIPT | Temp Blank: Yes |)No We | Wet Ice: Yes No | Only . | | |
| Temperature (°C): | 1.0/0.8 | | | - | | |
| Received Intact: | Kes No | - W.W O. | | / * | | |
| Cooler Custody Seals: | \$ | Correction Factor: | ctor | 5) | | |
| Sample Custody Seals: | No. | Total Containers: | ners: 14 | 801 | TAT st | TAT starts the day recevied by the |
| Sample Identification | ation Matrix | Date Time Sampled Sampled | e Depth | Number | 8 | Sample Comments |
| SWSP | S | 7560 10/8/1 | 1-41 | | | |
| Smag | | 0080 | 0 1-4 | - 6 | | Corporate |
| \$ w 100 | | 0803 | 3 0.4' | | | |
| 5w 101 | | 1080 | | | | |
| 52 103 | | 1150 | | | | - |
| SW 103 | | H180 | 4 0-4' | | | - |
| DHID | | 09 33 | | | | < |
| PHIOA | | 02 35 PC | | | | discrete |
| SUZA | / | S 201 10 0 | | | | ducate |
| SWS | 4 | 2161 | | | 0.0 | Margaret |
| Total 200.7 / 6010 | 200.8 / 6020: | 8RCRA | 13DDM Toyas 1 | | 0 | Cupurt |
| Circle Method(s) and Metal(s) to be analyzed | d Metal(s) to be ana | lyzed TCLP/ | TCLP / SPLP 6010: 8RCRA | A Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U | g SiO2 | Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg |
| service. Xenco will be liable o Xenco. A minimum charge of | only for the cost of sample: \$75.00 will be applied to e | samples constitutes a val s and shall not assume a ach project and a charge | id purchase order from ny responsibility for any of \$5 for each sample s | Service. Xenco will be liable only for the cost of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions Xenco. A minimum charge 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. | tractors. It assigns standard terms and conditions losses are due to circumstances beyond the control will be enforced unless previously negotiated. | |
| Relinquished by: (Signature) | nature) | Received by: (Signature | nature) | | Received by: (Signature) | Date/Time |
| | | No Citale | | 8:21 1606 ² | | |
| | | | | 6 | | |

Dan Moir

| Pag | e 479 of 520 |
|------------------|--------------|
| Project Manager: | 8 |

Chain of Custody

Work Order No: 684049

Work Order Comments

| D D D D D D D D D D D D D D D D D D D | Email: | 19 |
|---|----------------------|--------|
| City, State ZIP: Carlsbad, NM 88220 Reporting | Cit | 79705 |
| Address: 522 W. Mermod St. | Ad | Street |
| Company Name: XTO Energy Program | Co | |
| Bill to: (if different) Kyle Littrell | Bil | |
| Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) | Hobbs,NM (575-392-75 | |
| Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296 | Midland, T | RIES |
| Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 | Houston, T) | Ö |

| | | - Joseph - September - Septemb | Wall Older | - |
|--|-------------------------------------|--|---|-----|
| Company Name: | WSP USA | | WOIK Order Comments | |
| Address: | A Street | ne: XIO Energy | Program: UST/PST ☐RP ☐rownfields ☐RC \$\text{perfund} | |
| | Address: | 522 W. Mermod St. | State of Project: | L |
| City, State ZIP: | Midland, TX 79705 City, State ZIP: | Carlshad NM 88220 | | |
| Phone: | | Consocial, Mill COZEO | RP Livel IV | |
| · ···································· | (432) 236-3849 Email: Jeremy.Hill(| Email: Jeremy.Hill@wsp.com, Dan.Moir@wsp.com |] | |
| Project Name | 0 11 11 | S. reprooni | Other: | 0 |
| r roject Name: | 1100 4 WULVERY SUD RISH TURN Around | ANALYSIS REQUEST | | .00 |
| Project Number: | וסג | THE COUNTY OF TH | Work Order Notes | l 1 |
| P.O. Number: | مال طعله | | | Fin |
| Sampler's Name: | Jeremy Hill Due Date: | | | |
| SAMPLE RECEIPT | Temp Blank: Yes No West Van | | | |
| Temperature (°C): | Thermometer I | ers 674 | | |
| Received Intact: | Yes No San Hagas | .0) | | |
| Cooler Custody Seals: | Yes No N/A Correction Factor | 5) 802 | | |
| Sample Custody Seals: | Yes No N/A | 801 801 EPA | TAT starts the day received by the | |
| The state of the s | | 1 | | |

| | Relinquished by: (Signature) Received by: (Signature) | Date/Time | Received by: (Signature) |
|--|---|--|---|
| | iliates and subcontractors. It assigns standard terms and conditions y the client if such losses are due to circumstances beyond the control yzed. These terms will be enforced unless previously negotiated. | lent company to Xenco, its aff osses or expenses incurred by bmitted to Xenco, but not analy | **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 (**Service**). A minimum charge 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. |
| O2 Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg | Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Cr Co Cu Pb Mn Mo Ni Se Ag Tl U | Al Sb As Ba Be B A Sb As Ba Be Cd | Circle Method(s) and Metal(s) to be analyzed Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As a second transfer of samples constitutes a valid counter. |
| TAT starts the day received by the lab, if received by 4:30pm Sample Comments Ascrok | | Number of Containers TPH (EPA 8015) BTEX (EPA 0=8024) Chloride (EPA 300.0) | P.O. Number: |
| Work Order Notes | ANALYSIS REQUEST | | |

Received by OCD: 6

1

100

-8:21 1606

Received by: (Signature)

Date/Time

Revised Date 051418 Rev. 2018.1

Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-585-1

Laboratory Sample Delivery Group: TE012920091

Client Project/Site: Wolverine SWD Riser

Revision: 1

For:

WSP USA Inc. 2777 N. Stemmons Freeway Suite 1600 Dallas, Texas 75207

Attn: Dan Moir

MAMER

Authorized for release by: 5/7/2021 1:55:52 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 7/13/2021 11:08:53 AM

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

6

9

10

12

13

Client: WSP USA Inc.

Project/Site: Wolverine SWD Riser

Laboratory Job ID: 890-585-1

SDG: TE012920091

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|------------------------|----|
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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-585-1 Project/Site: Wolverine SWD Riser

SDG: TE012920091

Qualifiers

GC VOA Qualifier

Qualifier Description Surrogate recovery exceeds control limits, high biased. S1+

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

*+ LCS and/or LCSD is outside acceptance limits, high biased. S1+ Surrogate recovery exceeds control limits, high biased.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid **CFU** Colony Forming Unit **CNF** Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL **Practical Quantitation Limit**

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

Client: WSP USA Inc.

Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

Job ID: 890-585-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-585-1

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 5/5/2021. The report (revision 1) is being revised due to: Per client email, requesting re run of TPH for sample PH14 and PH14A.

The samples were received on 4/27/2021 3:05 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.0° C.

Receipt Exceptions

Per client email, requesting re run of TPH for sample PH14 and PH14A

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: PH13 (890-585-1), PH13A (890-585-2), PH14 (890-585-3), PH14A (890-585-4), PH15 (890-585-5), PH15A (890-585-6), PH16 (890-585-7), PH16A (890-585-8), PH17 (890-585-9), PH17A (890-585-10), PH18 (890-585-11), PH18A (890-585-12), PH19 (890-585-13), PH19A (890-585-14), PH20 (890-585-15) and PH20A (890-585-16).

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

Method 8015B NM: The laboratory control sample (LCS) associated with preparation batch 880-2476 and analytical batch 880-2591 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Eurofins Xenco, Carlsbad 5/7/2021 (Rev. 1)

Page 4 of 40

Released to Imaging: 7/13/2021 11:08:53 AM

Client: WSP USA Inc. Project/Site: Wolverine SWD Riser

Job ID: 890-585-1

SDG: TE012920091

Client Sample ID: PH13

Date Collected: 04/27/21 09:29 Date Received: 04/27/21 15:05

Sample Depth: - 4.5

Lab Sample ID: 890-585-1

Matrix: Solid

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00198 | U | 0.00198 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:34 | 1 |
| Toluene | <0.00198 | U | 0.00198 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:34 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:34 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:34 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:34 | 1 |
| Xylenes, Total | < 0.00396 | U | 0.00396 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:34 | 1 |
| Total BTEX | <0.00396 | U | 0.00396 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:34 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 95 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 14:34 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 14:34 | 1 |

| Method: 8015B NM - Diesel R | | | (GC) | | | | | |
|---|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 13:05 | 1 |
| Diesel Range Organics (Over C10-C28) | 58.5 | *+ | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 13:05 | 1 |
| Oll Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 13:05 | 1 |
| Total TPH | 58.5 | | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 13:05 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 109 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 13:05 | 1 |
| o-Terphenyl | 112 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 13:05 | 1 |

| Method: 300.0 - Anions, Ion Cl | hromatogra | phy - Solul | ole | | | | | |
|--------------------------------|------------|-------------|------|-------|---|----------|----------------|---------|
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Chloride | 67.6 | | 4.97 | mg/Kg | | | 04/29/21 22:33 | 1 |

Client Sample ID: PH13A Lab Sample ID: 890-585-2 Date Collected: 04/27/21 09:37 Matrix: Solid

Date Received: 04/27/21 15:05

Sample Depth: - 5.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:54 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:54 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:54 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:54 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:54 | 1 |
| Xylenes, Total | < 0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:54 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:54 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 97 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 14:54 | 1 |
| 1,4-Difluorobenzene (Surr) | 93 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 14:54 | 1 |

Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

Client Sample ID: PH13A Lab Sample ID: 890-585-2

36.5

Date Collected: 04/27/21 09:37 Matrix: Solid Date Received: 04/27/21 15:05

Sample Depth: - 5.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 14:09 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U *+ | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 14:09 | 1 |
| Oll Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 14:09 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 14:09 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 107 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 14:09 | 1 |
| o-Terphenyl | 112 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 14:09 | 1 |

4.95 **Client Sample ID: PH14** Lab Sample ID: 890-585-3

Date Collected: 04/27/21 09:46 **Matrix: Solid**

mg/Kg

Date Received: 04/27/21 15:05

Sample Depth: - 4.5

Chloride

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|--|-------------------------|--|-------------------------|----------|---|---|----------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:15 | 1 |
| Toluene | < 0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:15 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:15 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:15 | 1 |
| o-Xylene | < 0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:15 | 1 |
| Xylenes, Total | < 0.00400 | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:15 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:15 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 105 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 15:15 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 15:15 | 1 |
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Method: 8015B NM - Diesel R | ange Organi | ics (DRO) | (GC) | | | | | |
| Analyte Gasoline Range Organics | _ | Qualifier | • | Unit mg/Kg | <u>D</u> | Prepared 05/06/21 11:32 | Analyzed 05/07/21 05:56 | Dil Fac |
| Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over | Result | Qualifier | RL | | <u>D</u> | 05/06/21 11:32 | | 1 |
| Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) | Result <49.9 141 | Qualifier U | 49.9 49.9 | mg/Kg | <u>D</u> | 05/06/21 11:32 05/06/21 11:32 | 05/07/21 05:56 05/07/21 05:56 | 1 |
| Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) | Result <49.9 | Qualifier U | 49.9 49.9 | mg/Kg mg/Kg mg/Kg | <u>D</u> | 05/06/21 11:32 05/06/21 11:32 05/06/21 11:32 | 05/07/21 05:56 05/07/21 05:56 05/07/21 05:56 | 1 |
| Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) | Result <49.9 141 | Qualifier U | 49.9 49.9 | mg/Kg | <u>D</u> | 05/06/21 11:32 05/06/21 11:32 05/06/21 11:32 | 05/07/21 05:56 05/07/21 05:56 | 1 |
| Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH | Result <49.9 141 <49.9 | Qualifier U | 49.9 49.9 | mg/Kg mg/Kg mg/Kg | <u>D</u> | 05/06/21 11:32 05/06/21 11:32 05/06/21 11:32 | 05/07/21 05:56 05/07/21 05:56 05/07/21 05:56 | 1 |
| Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH Surrogate | Result <49.9 141 <49.9 141 | Qualifier U | 49.9 49.9 49.9 49.9 | mg/Kg mg/Kg mg/Kg | <u>D</u> | 05/06/21 11:32 05/06/21 11:32 05/06/21 11:32 05/06/21 11:32 | 05/07/21 05:56 05/07/21 05:56 05/07/21 05:56 05/07/21 05:56 | 1 1 |
| Analyte Gasoline Range Organics (GRO)-C6-C10 | Result <49.9 141 <49.9 141 %Recovery | Qualifier U | RL 49.9 49.9 49.9 49.9 <i>Limits</i> | mg/Kg mg/Kg mg/Kg | <u>D</u> | 05/06/21 11:32 05/06/21 11:32 05/06/21 11:32 05/06/21 11:32 Prepared 05/06/21 11:32 | 05/07/21 05:56 05/07/21 05:56 05/07/21 05:56 05/07/21 05:56 Analyzed | 1 |
| Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH Surrogate 1-Chlorooctane o-Terphenyl | Result <49.9 141 <49.9 141 | Qualifier U Qualifier | RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130 | mg/Kg mg/Kg mg/Kg | <u>D</u> | 05/06/21 11:32 05/06/21 11:32 05/06/21 11:32 05/06/21 11:32 Prepared 05/06/21 11:32 | 05/07/21 05:56 05/07/21 05:56 05/07/21 05:56 05/07/21 05:56 Analyzed 05/07/21 05:56 | 1 1 |
| Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH Surrogate 1-Chlorooctane | Result <49.9 | Qualifier U Qualifier | RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130 | mg/Kg mg/Kg mg/Kg | <u>D</u> | 05/06/21 11:32 05/06/21 11:32 05/06/21 11:32 05/06/21 11:32 Prepared 05/06/21 11:32 | 05/07/21 05:56 05/07/21 05:56 05/07/21 05:56 05/07/21 05:56 Analyzed 05/07/21 05:56 | Dil Face |

Eurofins Xenco, Carlsbad

04/29/21 22:48

5/7/2021 (Rev. 1)

Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

Client Sample ID: PH14A

Date Collected: 04/27/21 09:50 Date Received: 04/27/21 15:05

Sample Depth: - 5.5

| Lab | Samp | le ID | : 89 | 90- | 585-4 |
|-----|------|-------|------|-----|-------|
| | | | | | |

Matrix: Solid

| | 5 |
|--------|---|
| l Fac | |
| ı ı ac | |

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|-----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:35 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:35 | 1 |
| Ethylbenzene | < 0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:35 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:35 | 1 |
| o-Xylene | < 0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:35 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:35 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 04/29/21 10:36 | 04/30/21 15:35 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 110 | | 70 - 130 | 04/29/21 10:36 | 04/30/21 15:35 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | 04/29/21 10:36 | 04/30/21 15:35 | 1 |

| Method: 8015B NM | - Diesel Range | Organics | (DRO) (GC) |
|------------------|----------------|-----------------|------------|
| | | | |

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 05/06/21 11:32 | 05/07/21 06:17 | 1 |
| Diesel Range Organics (Over C10-C28) | 129 | | 50.0 | mg/Kg | | 05/06/21 11:32 | 05/07/21 06:17 | 1 |
| Oll Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 05/06/21 11:32 | 05/07/21 06:17 | 1 |
| Total TPH | 129 | | 50.0 | mg/Kg | | 05/06/21 11:32 | 05/07/21 06:17 | 1 |
| | | | | | | | | |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 94 | | 70 - 130 | 05/06/21 11:32 | 05/07/21 06:17 | 1 |
| o-Terphenyl | 99 | | 70 - 130 | 05/06/21 11:32 | 05/07/21 06:17 | 1 |
| | | | | | | |

| Method: 300.0 - Anions, | Ion Chromatography - Soluble |
|-------------------------|-------------------------------------|
| | |

| Analyte | Result Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|------------------|------|-------|---|----------|----------------|---------|
| Chloride | 454 | 5.00 | mg/Kg | | | 04/29/21 22:59 | 1 |

Client Sample ID: PH15 Lab Sample ID: 890-585-5 Date Collected: 04/27/21 10:04 Matrix: Solid

Date Received: 04/27/21 15:05

Sample Depth: - 4.5

| thod: | 8021R - | Volatile | Organic | Compounds | (GC) |
|-------|---------|----------|---------|-----------|------|

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|-----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:33 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:33 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:33 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:33 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:33 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:33 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:33 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |

4-Bromofluorobenzene (Surr) 99 70 - 130 04/29/21 10:36 04/30/21 16:33 1,4-Difluorobenzene (Surr) 91 70 - 130 04/29/21 10:36 04/30/21 16:33

Project/Site: Wolverine SWD Riser

Job ID: 890-585-1 SDG: TE012920091

Client Sample ID: PH15

Date Collected: 04/27/21 10:04 Date Received: 04/27/21 15:05

Sample Depth: - 4.5

Lab Sample ID: 890-585-5

Matrix: Solid

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 15:14 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U *+ | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 15:14 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 15:14 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 15:14 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 128 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 15:14 | 1 |
| o-Terphenyl | 133 | S1+ | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 15:14 | 1 |

Analyte Result Qualifier RLUnit Prepared **Analyzed** Dil Fac Chloride 50.9 5.04 mg/Kg 04/29/21 23:04

Client Sample ID: PH15A Lab Sample ID: 890-585-6

Date Collected: 04/27/21 10:09 Date Received: 04/27/21 15:05

Sample Depth: - 5.5

Method: 8021B - Volatile Organic Compounds (GC)

| gariic Compo | ilius (GC) | | | | | | |
|--------------|---|--------------------|--|---|---|--|---|
| Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:54 | 1 |
| <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:54 | 1 |
| <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:54 | 1 |
| <0.00401 | U | 0.00401 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:54 | 1 |
| <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:54 | 1 |
| < 0.00401 | U | 0.00401 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:54 | 1 |
| <0.00401 | U | 0.00401 | mg/Kg | | 04/29/21 10:36 | 04/30/21 16:54 | 1 |
| %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| | Result <0.00200 <0.00200 <0.00200 <0.00401 <0.00200 <0.00401 <0.00401 | Result Qualifier | Result Qualifier RL <0.00200 | Result Qualifier RL Unit <0.00200 | Result Qualifier RL Unit D <0.00200 | Result Qualifier RL Unit D Prepared <0.00200 | Result Qualifier RL Unit D Prepared 04/29/21 10:36 Analyzed 04/30/21 16:54 <0.00200 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|------------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 70 - 130 | 04/29/21 10:36 | 04/30/21 16:54 | 1 |
| 1,4-Difluorobenzene (Surr) | 91 | | 70 - 130 | 04/29/21 10:36 (| 04/30/21 16:54 | 1 |

| Method: 8015B NM - Diesel Ra | inge Organics (DRO) (GC) |
|------------------------------|--------------------------|
| | |

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 15:35 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U *+ | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 15:35 | 1 |
| Oll Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 15:35 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 15:35 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 140 | S1+ | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 15:35 | 1 |
| o-Terphenyl | 141 | S1+ | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 15:35 | 1 |

| Method: 300.0 - Anions, Ion Ch | nromatography - Solu | ble | | | | | |
|--------------------------------|----------------------|------|-------|---|----------|----------------|---------|
| Analyte | Result Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Chloride | 65.8 | 5.05 | mg/Kg | | | 04/29/21 23:09 | 1 |

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Matrix: Solid

5/7/2021 (Rev. 1)

Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

Client Sample ID: PH16 Lab Sample ID: 890-585-7 Matrix: Solid

Date Collected: 04/27/21 10:22 Date Received: 04/27/21 15:05

Sample Depth: - 4.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:14 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:14 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:14 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:14 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:14 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:14 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:14 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 17:14 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 17:14 | 1 |

| Method: 8015B NM - Diesel Ra | ange Organ | ics (DRO) | (GC) | | | | | |
|---|------------|-----------|----------|-------|---|----------------|----------------|---------|
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | _ | 04/29/21 10:18 | 05/01/21 15:56 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U *+ | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 15:56 | 1 |
| Oll Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 15:56 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 15:56 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 118 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 15:56 | 1 |
| o-Terphenyl | 120 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 15:56 | 1 |

| Method: 300.0 - Anions, Ion Cl | hromatography - Solul | ble | | | | | |
|--------------------------------|-----------------------|------|-------|---|----------|----------------|---------|
| Analyte | Result Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Chloride | 409 | 24.9 | mg/Kg | | | 04/29/21 23:14 | 5 |

Client Sample ID: PH16A Lab Sample ID: 890-585-8 Date Collected: 04/27/21 10:27 Matrix: Solid

Date Received: 04/27/21 15:05

Sample Depth: - 5.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:34 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:34 | 1 |
| Ethylbenzene | < 0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:34 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:34 | 1 |
| o-Xylene | < 0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:34 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:34 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:34 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 98 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 17:34 | 1 |
| 1,4-Difluorobenzene (Surr) | 91 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 17:34 | 1 |

Matrix: Solid

Client: WSP USA Inc.

Project/Site: Wolverine SWD Riser

Job ID: 890-585-1 SDG: TE012920091

Lab Sample ID: 890-585-8

Client Sample ID: PH16A Date Collected: 04/27/21 10:27

Date Received: 04/27/21 15:05

Sample Depth: - 5.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 16:18 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U *+ | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 16:18 | 1 |
| Oll Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 16:18 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 16:18 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 106 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 16:18 | 1 |
| o-Terphenyl | 107 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 16:18 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Unit Analyte RL Prepared **Analyzed** Dil Fac Chloride 406 50.0 mg/Kg 04/29/21 15:49

Client Sample ID: PH17 Lab Sample ID: 890-585-9 **Matrix: Solid**

Date Collected: 04/27/21 10:41 Date Received: 04/27/21 15:05

Sample Depth: - 4.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:55 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:55 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:55 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:55 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:55 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:55 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 17:55 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 100 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 17:55 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 17:55 | 1 |

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 16:39 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U *+ | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 16:39 | 1 |
| Oll Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 16:39 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 16:39 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 107 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 16:39 | 1 |
| o-Terphenyl | 102 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 16:39 | 1 |

| Method. 300.0 - Amons, ion Chi | omatography - 30 | oluble | | | | | |
|--------------------------------|------------------|--------|-------|---|----------|----------------|---------|
| Analyte | Result Qualifier | · RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Chloride | 239 | 5.03 | mg/Kg | | | 04/29/21 15:55 | 1 |

Client: WSP USA Inc. Job ID: 890-585-1

Project/Site: Wolverine SWD Riser SDG: TE012920091

Client Sample ID: PH17A Lab Sample ID: 890-585-10 Date Collected: 04/27/21 10:44 Matrix: Solid Date Received: 04/27/21 15:05

Sample Depth: - 5.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 18:15 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 18:15 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 18:15 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 18:15 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 18:15 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 18:15 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 18:15 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 110 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 18:15 | 1 |
| 1,4-Difluorobenzene (Surr) | 99 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 18:15 | 1 |
| Method: 8015B NM - Diese | l Range Organ | ics (DRO) | (GC) | | | | | |
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Gasoline Range Organics | <50.0 | U | 50.0 | ma/Ka | | 04/29/21 10:18 | 05/01/21 17:00 | |

| Method: 8015B NM - Diesel R | ange Organ | ics (DRO) | (GC) | | | | | |
|---|------------|-----------|----------|-------|---|----------------|----------------|---------|
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 17:00 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U *+ | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 17:00 | 1 |
| Oll Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 17:00 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 17:00 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 108 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 17:00 | 1 |
| o-Terphenyl | 111 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 17:00 | 1 |

| Method: 300.0 - Anions, Ion Ch | romatogra | phy - Solu | ble | | | | | |
|--------------------------------|-----------|------------|------|-------|---|----------|----------------|---------|
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Chloride | 159 | | 5.04 | mg/Kg | | | 04/29/21 16:00 | 1 |

Lab Sample ID: 890-585-11 Client Sample ID: PH18 Date Collected: 04/27/21 10:59

Date Received: 04/27/21 15:05

Sample Depth: - 4.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:37 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:37 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:37 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:37 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:37 | 1 |
| Xylenes, Total | < 0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:37 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:37 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 93 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 19:37 | 1 |
| 1,4-Difluorobenzene (Surr) | 91 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 19:37 | 1 |

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Matrix: Solid

Client: WSP USA Inc.

Job ID: 890-585-1

Project/Site: Wolvering SWD Ricer

SDG: TE012920091

Project/Site: Wolverine SWD Riser SDG: TE012920091

Client Sample ID: PH18

Date Collected: 04/27/21 10:59

Lab Sample ID: 890-585-11

Matrix: Solid

Date Received: 04/27/21 15:05 Sample Depth: - 4.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 17:43 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U *+ | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 17:43 | 1 |
| Oll Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 17:43 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 17:43 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 116 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 17:43 | 1 |
| o-Terphenyl | 118 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 17:43 | 1 |

Client Sample ID: PH18A Lab Sample ID: 890-585-12

4.95

mg/Kg

170

Date Collected: 04/27/21 11:02 Matrix: Solid
Date Received: 04/27/21 15:05

Sample Depth: - 5.5

Chloride

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:58 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:58 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:58 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:58 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:58 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:58 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 04/29/21 10:36 | 04/30/21 19:58 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 89 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 19:58 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 19:58 | 1 |
| Method: 8015B NM - Diese | l Range Organ | ics (DRO) | (GC) | | | | | |
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Gasoline Range Organics | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:04 | 1 |

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:04 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U *+ | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:04 | 1 |
| Oll Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:04 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:04 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 132 | S1+ | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 18:04 | 1 |
| o-Terphenyl | 133 | S1+ | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 18:04 | 1 |

| Method: 300.0 - Anions, Ion Cl | romatography - | - Soluble | | | | | | |
|--------------------------------|----------------|-----------|-------|---|----------|----------------|---------|--|
| Analyte | Result Quali | ifier RL | Unit | D | Prepared | Analyzed | Dil Fac | |
| Chloride | 111 | 5.00 | mg/Kg | | | 05/04/21 04:16 | 1 | |

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10

14

05/04/21 04:11

4 4

5/7/2021 (Pov

Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

Client Sample ID: PH19 Lab Sample ID: 890-585-13

Date Collected: 04/27/21 12:15 Matrix: Solid Date Received: 04/27/21 15:05

Sample Depth: - 4.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U | 0.00202 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:18 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:18 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:18 | 1 |
| m-Xylene & p-Xylene | <0.00404 | U | 0.00404 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:18 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:18 | 1 |
| Xylenes, Total | <0.00404 | U | 0.00404 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:18 | 1 |
| Total BTEX | <0.00404 | U | 0.00404 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:18 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 93 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 20:18 | 1 |
| 1,4-Difluorobenzene (Surr) | 92 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 20:18 | 1 |

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:25 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U *+ | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:25 | 1 |
| Oll Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:25 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:25 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 128 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 18:25 | 1 |
| o-Terphenyl | 123 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 18:25 | 1 |

| Method: 300.0 - Anions, Ion Cl | hromatography - Solub | ole | | | | | |
|--------------------------------|-----------------------|------|-------|---|----------|----------------|---------|
| Analyte | Result Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Chloride | 101 | 5.04 | mg/Kg | | | 04/29/21 23:30 | 1 |

Lab Sample ID: 890-585-14 **Client Sample ID: PH19A** Date Collected: 04/27/21 12:19 Matrix: Solid

Date Received: 04/27/21 15:05

Sample Depth: - 5.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:38 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:38 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:38 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:38 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:38 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:38 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:38 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 98 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 20:38 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 20:38 | 1 |

Matrix: Solid

04/29/21 23:35

Client: WSP USA Inc. Job ID: 890-585-1

Project/Site: Wolverine SWD Riser SDG: TE012920091

Client Sample ID: PH19A Lab Sample ID: 890-585-14 Date Collected: 04/27/21 12:19 Date Received: 04/27/21 15:05

Sample Depth: - 5.5

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:46 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U *+ | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:46 | 1 |
| Oll Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:46 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 18:46 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 129 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 18:46 | 1 |
| o-Terphenyl | 126 | | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 18:46 | 1 |

4.97 Lab Sample ID: 890-585-15 **Client Sample ID: PH20**

46.2

Date Collected: 04/27/21 12:33 **Matrix: Solid**

mg/Kg

Date Received: 04/27/21 15:05 Sample Depth: - 4.5

Chloride

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:59 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:59 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:59 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:59 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:59 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:59 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 04/29/21 10:36 | 04/30/21 20:59 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 96 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 20:59 | 1 |
| 1,4-Difluorobenzene (Surr) | 91 | | 70 - 130 | | | 04/29/21 10:36 | 04/30/21 20:59 | 1 |

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 19:07 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U *+ | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 19:07 | 1 |
| Oll Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 19:07 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 04/29/21 10:18 | 05/01/21 19:07 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 142 | S1+ | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 19:07 | 1 |
| o-Terphenyl | 136 | S1+ | 70 - 130 | | | 04/29/21 10:18 | 05/01/21 19:07 | 1 |

| Method: 300.0 - Anions, Ion Chromatography - Soluble | | | | | | | | | |
|--|----------|------------------|------|-------|---|----------|----------------|---------|--|
| | Analyte | Result Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac | |
| | Chloride | 147 | 4.95 | mg/Kg | | | 04/29/21 23:51 | 1 | |

Job ID: 890-585-1

Client: WSP USA Inc. Project/Site: Wolverine SWD Riser SDG: TE012920091

Lab Sample ID: 890-585-16 **Client Sample ID: PH20A Matrix: Solid**

Date Collected: 04/27/21 12:37 Date Received: 04/27/21 15:05

| Method: 8021B - Volatile Orga | • | | | | | | | |
|--|--|--------------------------|--|-------------------------|----------|--|--|---------|
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Benzene | < 0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 21:19 | 1 |
| Toluene | < 0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 21:19 | 1 |
| Ethylbenzene | < 0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 21:19 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 04/29/21 10:36 | 04/30/21 21:19 | 1 |
| o-Xylene | < 0.00199 | U | 0.00199 | mg/Kg | | 04/29/21 10:36 | 04/30/21 21:19 | 1 |
| Xylenes, Total | < 0.00398 | U | 0.00398 | mg/Kg | | 04/29/21 10:36 | 04/30/21 21:19 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 04/29/21 10:36 | 04/30/21 21:19 | 1 |
| | | | | | | | | |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| | %Recovery | Qualifier | <u>Limits</u> 70 - 130 | | | Prepared 04/29/21 10:36 | Analyzed 04/30/21 21:19 | Dil Fac |
| Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) | 97 89 | | 70 - 130 70 - 130 | | | 04/29/21 10:36 | | Dil Fa |
| 4-Bromofluorobenzene (Surr) | 97 89 ange Organ | | 70 - 130 70 - 130 | Unit | D | 04/29/21 10:36 | 04/30/21 21:19 | 1 |
| 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Method: 8015B NM - Diesel R | 97 89 ange Organ | ics (DRO) (Qualifier | 70 - 130 70 - 130 (GC) | Unit mg/Kg | <u>D</u> | 04/29/21 10:36 04/29/21 10:36 | 04/30/21 21:19 04/30/21 21:19 | Dil Fac |
| 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Method: 8015B NM - Diesel R Analyte Gasoline Range Organics | 97 89 ange Organ Result | ics (DRO) (Qualifier | 70 - 130 70 - 130 (GC) | | <u>D</u> | 04/29/21 10:36 04/29/21 10:36 Prepared 04/29/21 10:18 | 04/30/21 21:19 04/30/21 21:19 Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over | 97 89 ange Organ Result <49.9 | Qualifier U *+ | 70 - 130 70 - 130 (GC) RL 49.9 | mg/Kg | <u> </u> | 04/29/21 10:36 04/29/21 10:36 Prepared 04/29/21 10:18 04/29/21 10:18 | 04/30/21 21:19 04/30/21 21:19 Analyzed 05/01/21 19:28 | Dil Fac |
| 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Method: 8015B NM - Diesel R Analyte Gasoline Range Organics GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) | 97 89 ange Organ Result <49.9 | Qualifier U *+ | 70 - 130 70 - 130 (GC) RL 49.9 | mg/Kg | <u>D</u> | 04/29/21 10:36 04/29/21 10:36 Prepared 04/29/21 10:18 04/29/21 10:18 04/29/21 10:18 | 04/30/21 21:19 04/30/21 21:19 04/30/21 21:19 Analyzed 05/01/21 19:28 05/01/21 19:28 | Dil Fac |
| 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) | 97 89 ange Organ Result <49.9 <49.9 | U*+ | 70 - 130 70 - 130 (GC) RL 49.9 49.9 | mg/Kg mg/Kg mg/Kg | <u>D</u> | 04/29/21 10:36 04/29/21 10:36 Prepared 04/29/21 10:18 04/29/21 10:18 04/29/21 10:18 | 04/30/21 21:19 04/30/21 21:19 04/30/21 21:19 Analyzed 05/01/21 19:28 05/01/21 19:28 | Dil Fac |
| 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH | 97 89 ange Organ Result <49.9 <49.9 <49.9 <49.9 %Recovery | U*+ | 70 - 130 70 - 130 (GC) RL 49.9 49.9 49.9 | mg/Kg mg/Kg mg/Kg | <u>D</u> | 04/29/21 10:36 04/29/21 10:36 Prepared 04/29/21 10:18 04/29/21 10:18 04/29/21 10:18 | 04/30/21 21:19 04/30/21 21:19 04/30/21 21:19 Analyzed 05/01/21 19:28 05/01/21 19:28 05/01/21 19:28 | Dil Fac |

| Method: 300.0 - Anions, Ion Chromatography - Soluble | | | | | | | | | |
|--|--------|-----------|------|-------|---|----------|----------------|---------|--|
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac | |
| Chloride | 105 | | 5.05 | mg/Kg | | | 04/30/21 12:45 | 1 | |

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

| | | DED.4 | | Surrogate Recovery (Acceptance Limits) |
|-------------------|------------------------|----------|----------|--|
| | | BFB1 | DFBZ1 | |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | |
| 890-585-1 | PH13 | 95 | 94 | |
| 890-585-2 | PH13A | 97 | 93 | |
| 890-585-3 | PH14 | 105 | 94 | |
| 890-585-4 | PH14A | 110 | 94 | |
| 890-585-5 | PH15 | 99 | 91 | |
| 890-585-6 | PH15A | 90 | 91 | |
| 890-585-7 | PH16 | 101 | 94 | |
| 890-585-8 | PH16A | 98 | 91 | |
| 890-585-9 | PH17 | 100 | 94 | |
| 890-585-10 | PH17A | 110 | 99 | |
| 890-585-11 | PH18 | 93 | 91 | |
| 890-585-12 | PH18A | 89 | 94 | |
| 890-585-13 | PH19 | 93 | 92 | |
| 890-585-14 | PH19A | 98 | 94 | |
| 890-585-15 | PH20 | 96 | 91 | |
| 890-585-16 | PH20A | 97 | 89 | |
| LCS 880-2461/1-A | Lab Control Sample | 111 | 100 | |
| LCSD 880-2461/2-A | Lab Control Sample Dup | 116 | 101 | |
| MB 880-2461/5-A | Method Blank | 250 S1+ | 257 S1+ | |

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|---------------------|------------------|--|-------|--|--|--|--|
| | | BFB1 | DFBZ1 | | | | |
| Lab Sample ID | Client Sample ID | | | | | | |
| 890-585-1 MS | PH13 | | | | | | |
| 890-585-1 MSD | PH13 | | | | | | |
| Surrogate Legend | | | | | | | |
| BFB = 4-Bromofluor | obenzene (Surr) | | | | | | |
| DFBZ = 1,4-Difluoro | benzene (Surr) | | | | | | |

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

| _ | | | Perce |
|---------------|------------------|----------|----------|
| | | 1CO1 | OTPH1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 890-585-1 | PH13 | 109 | 112 |
| 890-585-1 MS | PH13 | 101 | 93 |
| 890-585-1 MSD | PH13 | 124 | 109 |
| 890-585-2 | PH13A | 107 | 112 |
| 890-585-3 | PH14 | 97 | 101 |
| 890-585-4 | PH14A | 94 | 99 |
| 890-585-5 | PH15 | 128 | 133 S1+ |
| 890-585-6 | PH15A | 140 S1+ | 141 S1+ |

Surrogate Summary

Client: WSP USA Inc.

Job ID: 890-585-1

Project/Site: Wolverine SWD Riser

SDG: TE012920091

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

| | | | | nt Surrogate Recovery (Acceptance Limits) |
|-------------------|------------------------|----------|----------|---|
| | | 1CO1 | OTPH1 | |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | |
| 390-585-7 | PH16 | 118 | 120 | |
| 890-585-8 | PH16A | 106 | 107 | |
| 390-585-9 | PH17 | 107 | 102 | |
| 390-585-10 | PH17A | 108 | 111 | |
| 390-585-11 | PH18 | 116 | 118 | |
| 390-585-12 | PH18A | 132 S1+ | 133 S1+ | |
| 390-585-13 | PH19 | 128 | 123 | |
| 390-585-14 | PH19A | 129 | 126 | |
| 390-585-15 | PH20 | 142 S1+ | 136 S1+ | |
| 390-585-16 | PH20A | 134 S1+ | 127 | |
| CS 880-2476/2-A | Lab Control Sample | 120 | 112 | |
| CS 880-2705/2-A | Lab Control Sample | 111 | 107 | |
| _CS 880-2771/2-A | Lab Control Sample | 105 | 105 | |
| CSD 880-2476/3-A | Lab Control Sample Dup | 123 | 111 | |
| _CSD 880-2705/3-A | Lab Control Sample Dup | 112 | 107 | |
| _CSD 880-2771/3-A | Lab Control Sample Dup | 105 | 104 | |
| MB 880-2476/1-A | Method Blank | 114 | 121 | |
| MB 880-2705/1-A | Method Blank | 107 | 110 | |
| MB 880-2771/1-A | Method Blank | 96 | 105 | |

1CO = 1-Chlorooctane OTPH = o-Terphenyl

Client: WSP USA Inc. Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-2461/5-A

Matrix: Solid

Analysis Batch: 2544

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2461

| | MB I | MB | | | | | | |
|---------------------|------------|-----------|---------|-------|---|----------------|----------------|---------|
| Analyte | Result (| Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:12 | 1 |
| Toluene | <0.00200 U | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:12 | 1 |
| Ethylbenzene | <0.00200 U | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:12 | 1 |
| m-Xylene & p-Xylene | <0.00400 U | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:12 | 1 |
| o-Xylene | <0.00200 U | U | 0.00200 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:12 | 1 |
| Xylenes, Total | <0.00400 U | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:12 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 04/29/21 10:36 | 04/30/21 14:12 | 1 |
| | | | | | | | | |

MB MB

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 250 | S1+ | 70 - 130 | 04/29/21 10:36 | 04/30/21 14:12 | 1 |
| 1,4-Difluorobenzene (Surr) | 257 | S1+ | 70 - 130 | 04/29/21 10:36 | 04/30/21 14:12 | 1 |

Lab Sample ID: LCS 880-2461/1-A

Matrix: Solid

Analysis Batch: 2544

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 2461

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Benzene 0.100 0.1170 mg/Kg 117 70 - 130 Toluene 0.100 0.1110 mg/Kg 111 70 - 130 Ethylbenzene 0.100 mg/Kg 0.1141 114 70 - 130 m-Xylene & p-Xylene 0.200 0.2464 mg/Kg 123 70 - 130 0.100 0.1228 123 o-Xylene mg/Kg 70 - 130

LCS LCS

| Surrogate | %Recovery Qualit | ier Limits |
|-----------------------------|------------------|------------|
| 4-Bromofluorobenzene (Surr) | 111 | 70 - 130 |
| 1.4-Difluorobenzene (Surr) | 100 | 70 - 130 |

Lab Sample ID: LCSD 880-2461/2-A

Matrix: Solid

Analysis Batch: 2544

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2461

| | Spike | LCSD LCSD | | | %Rec. | | RPD |
|---------------------|-------|------------------|-------|--------|------------|-----|-------|
| Analyte | Added | Result Qualifier | Unit | D %Red | Limits | RPD | Limit |
| Benzene | 0.100 | 0.1131 | mg/Kg | 113 | 70 - 130 | 3 | 35 |
| Toluene | 0.100 | 0.1073 | mg/Kg | 107 | 70 - 130 | 3 | 35 |
| Ethylbenzene | 0.100 | 0.1115 | mg/Kg | 112 | 2 70 - 130 | 2 | 35 |
| m-Xylene & p-Xylene | 0.200 | 0.2428 | mg/Kg | 12 | 70 - 130 | 1 | 35 |
| o-Xylene | 0.100 | 0.1210 | mg/Kg | 12 | 70 - 130 | 1 | 35 |

LCSD LCSD

| Surrogate | %Recovery Qualifier | Limits |
|-----------------------------|---------------------|----------|
| 4-Bromofluorobenzene (Surr) | 116 | 70 - 130 |
| 1.4-Difluorobenzene (Surr) | 101 | 70 - 130 |

Lab Sample ID: 890-585-1 MS

Matrix: Solid

Analysis Batch: 2544

| | | | | | | | C | lient Sample ID: PH13 Prep Type: Total/NA |
|--------|-----------|-------|--------|-----------|------|---|------|--|
| | | | | | | | | Prep Batch: 2461 |
| Sample | Sample | Spike | MS | MS | | | | %Rec. |
| Result | Qualifier | habbΔ | Result | Qualifier | Unit | D | %Rec | l imits |

Analyte Benzene <0.00198 U 0.0992 0.09205 mg/Kg

Eurofins Xenco, Carlsbad

1

QC Sample Results

Client: WSP USA Inc. Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

%Recovery Qualifier

Lab Sample ID: 890-585-1 MS **Client Sample ID: PH13 Prep Type: Total/NA Matrix: Solid Analysis Batch: 2544** Prep Batch: 2461

| | Sample | Sample | Spike | MS | MS | | | | %Rec. | |
|---------------------|-----------|-----------|--------|---------|-----------|-------|---|------|--------|--|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | |
| Toluene | <0.00198 | U | 0.0992 | 0.08546 | | mg/Kg | | | | |
| Ethylbenzene | <0.00198 | U | 0.0992 | 0.08608 | | mg/Kg | | | | |
| m-Xylene & p-Xylene | < 0.00396 | U | 0.198 | 0.1833 | | mg/Kg | | | | |
| o-Xylene | <0.00198 | U | 0.0992 | 0.09109 | | mg/Kg | | | | |
| | MS | MS | | | | | | | | |

Limits

Limits

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Lab Sample ID: 890-585-1 MSD **Client Sample ID: PH13** Prep Type: Total/NA

Matrix: Solid

Surrogate

| Analysis Batch: 2544 | | | | | | | | | Prep | Batcn: | 2461 |
|----------------------|-----------|-----------|--------|---------|-----------|-------|---|------|--------|--------|-------|
| | Sample | Sample | Spike | MSD | MSD | | | | %Rec. | | RPD |
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
| Benzene | <0.00198 | U | 0.0994 | 0.09939 | | mg/Kg | | | | | |
| Toluene | <0.00198 | U | 0.0994 | 0.09362 | | mg/Kg | | | | | |
| Ethylbenzene | <0.00198 | U | 0.0994 | 0.09403 | | mg/Kg | | | | | |
| m-Xylene & p-Xylene | < 0.00396 | U | 0.199 | 0.2022 | | mg/Kg | | | | | |
| o-Xylene | <0.00198 | U | 0.0994 | 0.1003 | | mg/Kg | | | | | |
| | MCD | MCD | | | | | | | | | |
| | MSD | MSD | | | | | | | | | |

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Surrogate

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

%Recovery Qualifier

Lab Sample ID: MB 880-2476/1-A **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA Prep Batch: 2476 **Analysis Batch: 2591**

| | MB | MB | | | | | | |
|---|--------|-----------|------|-------|---|----------------|----------------|---------|
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | Ū | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 11:38 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 11:38 | 1 |
| Oll Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 11:38 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 04/29/21 10:18 | 05/01/21 11:38 | 1 |

| | MB | MB | | | | |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 114 | | 70 - 130 | 04/29/21 10:18 | 05/01/21 11:38 | 1 |
| o-Terphenyl | 121 | | 70 - 130 | 04/29/21 10:18 | 05/01/21 11:38 | 1 |

Lab Sample ID: LCS 880-2476/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 2591

Prep Batch: 2476 LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits 1000 Gasoline Range Organics 1141 mg/Kg 114 70 - 130

(GRO)-C6-C10

Client: WSP USA Inc.

Job ID: 890-585-1
Project/Site: Wolverine SWD Riser

SDG: TE012920091

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-2476/2-A

Matrix: Solid

Analysis Batch: 2591

Spike

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2476
%Rec.

| | Spike | LCS | LCS | | | | %Rec. | |
|-----------------------------|----------|--------|-----------|-------|---|------|----------|--|
| Analyte | Added | Result | Qualifier | Unit | D | %Rec | Limits | |
| Diesel Range Organics (Over | 1000 | 1171 | | mg/Kg | | 117 | 70 - 130 | |
| C10 C28) | | | | | | | | |

C10-C28)

| | LUS LUS | | | | |
|----------------|---------------|---------------|--|--|--|
| Surrogate | %Recovery Qua | lifier Limits | | | |
| 1-Chlorooctane | 120 | 70 - 130 | | | |
| o-Terphenyl | 112 | 70 - 130 | | | |

Lab Sample ID: LCSD 880-2476/3-A

Matrix: Solid

Analysis Batch: 2591

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Prep Batch: 2476

Spike LCSD LCSD RPD %Rec. Added Result Qualifier Limits RPD Limit **Analyte** Unit %Rec Gasoline Range Organics 1000 1192 119 70 - 130 4 20 mg/Kg (GRO)-C6-C10 1000 20 Diesel Range Organics (Over 1423 *+ mg/Kg 142 70 - 130 19 C10-C28)

LCSD LCSD

| Surrogate | %Recovery | Qualifier | Limits |
|----------------|-----------|-----------|----------|
| 1-Chlorooctane | 123 | | 70 - 130 |
| o-Terphenyl | 111 | | 70 - 130 |

Lab Sample ID: 890-585-1 MS

Matrix: Solid

Analysis Batch: 2591

Prop Batch: 2476

Analysis Batch: 2591

Sample Sample Spike MS MS %Rec.

Analysis Batch: 2476

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <49.9 U 998 1169 mg/Kg 115 70 - 130 (GRO)-C6-C10 58.5 *+ 998 1056 Diesel Range Organics (Over mg/Kg 100 70 - 130 C10-C28)

0.0020)

| | MS | MS | |
|----------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane | 101 | | 70 - 130 |
| o-Terphenyl | 93 | | 70 - 130 |

Lab Sample ID: 890-585-1 MSD

Matrix: Solid

Analysis Batch: 2591

Client Sample ID: PH13

Prep Type: Total/NA

Prep Batch: 2476

Sample Sample Spike MSD MSD %Rec. **RPD** Analyte Result Qualifier Added Result Qualifier Unit Limits RPD Limit %Rec Gasoline Range Organics <49.9 U 998 1101 mg/Kg 108 70 - 130 6 20 (GRO)-C6-C10 998 58.5 *+ 1292 124 70 - 130 20 20 Diesel Range Organics (Over mg/Kg C10-C28)

| | MSD | MSD | |
|----------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane | 124 | | 70 - 130 |
| o-Terphenyl | 109 | | 70 - 130 |

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QC Sample Results

Client: WSP USA Inc. Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-2705/1-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2705

| | MB | MB | | | | | | |
|---|--------|-----------|------|-------|---|----------------|----------------|---------|
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 05/05/21 09:09 | 05/06/21 00:46 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 05/05/21 09:09 | 05/06/21 00:46 | 1 |
| Oll Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 05/05/21 09:09 | 05/06/21 00:46 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 05/05/21 09:09 | 05/06/21 00:46 | 1 |

MB MB

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 107 | | 70 - 130 | 05/05/21 09:09 | 05/06/21 00:46 | 1 |
| o-Terphenyl | 110 | | 70 - 130 | 05/05/21 09:09 | 05/06/21 00:46 | 1 |

Lab Sample ID: LCS 880-2705/2-A

Analysis Batch: 2715

Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA Prep Batch: 2705

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 976.9 mg/Kg 98 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 827.9 mg/Kg 83 70 - 130

C10-C28)

LCS LCS

| Surrogate | %Recovery Q | ualifier | Limits |
|----------------|-------------|----------|----------|
| 1-Chlorooctane | 111 | | 70 - 130 |
| o-Terphenyl | 107 | | 70 - 130 |

Lab Sample ID: LCSD 880-2705/3-A

Client Sample ID: Lab Control Sample Dup Matrix: Solid Prep Type: Total/NA **Analysis Batch: 2715** Prep Batch: 2705

LCSD LCSD RPD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics 1000 908.1 91 70 - 130 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 838.9 mg/Kg 84 70 - 130 20

C10-C28)

LCSD LCSD

| Surrogate | %Recovery | Qualifier | Limits |
|----------------|-----------|-----------|----------|
| 1-Chlorooctane | 112 | | 70 - 130 |
| o-Terphenyl | 107 | | 70 - 130 |

Lab Sample ID: MB 880-2771/1-A

Matrix: Solid

Analysis Batch: 2795

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 2771

MB MB

| - 1 | | | | | | | | | |
|-----|---|--------|-----------|------|-------|---|----------------|----------------|---------|
| | Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| | Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 05/06/21 11:32 | 05/06/21 21:36 | 1 |
| | Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 05/06/21 11:32 | 05/06/21 21:36 | 1 |
| | Oll Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 05/06/21 11:32 | 05/06/21 21:36 | 1 |
| | Total TPH | <50.0 | U | 50.0 | mg/Kg | | 05/06/21 11:32 | 05/06/21 21:36 | 1 |

Client: WSP USA Inc. Project/Site: Wolverine SWD Riser

Job ID: 890-585-1

SDG: TE012920091

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

| | МВ | МВ | | | | |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 96 | | 70 - 130 | 05/06/21 11:32 | 05/06/21 21:36 | 1 |
| o-Terphenyl | 105 | | 70 - 130 | 05/06/21 11:32 | 05/06/21 21:36 | 1 |

Lab Sample ID: LCS 880-2771/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Total/NA Analysis Batch: 2795** Prep Batch: 2771

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec Gasoline Range Organics 1000 830.9 mg/Kg 83 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1091 mg/Kg 109 70 - 130 C10-C28)

LCS LCS %Recovery Qualifier Surrogate Limits 1-Chlorooctane 105 70 - 130

105

Client Sample ID: Lab Control Sample Dup Lab Sample ID: LCSD 880-2771/3-A **Matrix: Solid** Prep Type: Total/NA

70 - 130

Analysis Batch: 2795 Prep Batch: 2771

LCSD LCSD RPD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits RPD Limit 1000 866.9 87 70 - 130 20 Gasoline Range Organics mg/Kg 4 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1079 mg/Kg 108 70 - 130 20 C10-C28)

LCSD LCSD

| Surrogate | %Recovery Qualifier | Limits |
|----------------|---------------------|----------|
| 1-Chlorooctane | 105 | 70 - 130 |
| o-Terphenyl | 104 | 70 - 130 |

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2479/1-A **Client Sample ID: Method Blank Matrix: Solid Prep Type: Soluble**

Analysis Batch: 2498

o-Terphenyl

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac 5.00 Chloride <5.00 U 04/29/21 13:24 mg/Kg

Lab Sample ID: LCS 880-2479/2-A Client Sample ID: Lab Control Sample

Analysis Batch: 2498

Matrix: Solid

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit %Rec 250 Chloride 249.0 100 90 - 110 mg/Kg

Lab Sample ID: LCSD 880-2479/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid Analysis Batch: 2498

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Spike LCSD LCSD %Rec. **RPD** Analyte Added Result Qualifier Unit D Limits RPD Limit %Rec Chloride 250 247.0 mg/Kg 99 90 - 110

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Prep Type: Soluble

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: PH16

Client Sample ID: PH16

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Client: WSP USA Inc. Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2488/1-A

Matrix: Solid

Analysis Batch: 2512

MB MB

Result Qualifier RL Unit D Analyzed Dil Fac Analyte Prepared 5.00 04/29/21 21:46 Chloride <5.00 U mg/Kg

Lab Sample ID: LCS 880-2488/2-A

Matrix: Solid

Analysis Batch: 2512

Spike LCS LCS %Rec. Added Result Qualifier Unit D %Rec Limits Analyte 250 90 - 110 Chloride 244.8 mg/Kg 98

Lab Sample ID: LCSD 880-2488/3-A **Matrix: Solid**

Analysis Batch: 2512

Spike LCSD LCSD %Rec. **RPD** Added Result Qualifier Limits **RPD Analyte** Unit D %Rec Limit Chloride 250 245.0 98 20 mg/Kg

Lab Sample ID: 890-585-7 MS

Matrix: Solid

Analysis Batch: 2512

Spike MS MS %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 1250 1620 409 mg/Kg 90 - 110

Lab Sample ID: 890-585-7 MSD

Matrix: Solid

Analysis Batch: 2512

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added RPD Result Qualifier Unit %Rec Limits Limit Chloride 409 1250 1619 97 90 - 110 mg/Kg

Lab Sample ID: MB 880-2494/1-A

Matrix: Solid

Analysis Batch: 2660

MB MB

Result Qualifier Analyte RL Unit D Dil Fac Prepared Analyzed 5.00 05/04/21 01:42 Chloride <5.00 U mg/Kg

Lab Sample ID: LCS 880-2494/2-A

Matrix: Solid

Analysis Batch: 2660

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit %Rec Chloride 250 247.0 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-2494/3-A

Matrix: Solid

Analysis Batch: 2660

Spike LCSD LCSD %Rec. **RPD RPD** Added Analyte Result Qualifier Unit D %Rec Limits Limit Chloride 250 90 - 110 247.0 mg/Kg 99 20

QC Association Summary

Job ID: 890-585-1 Client: WSP USA Inc. Project/Site: Wolverine SWD Riser SDG: TE012920091

GC VOA

Prep Batch: 2461

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 890-585-1 | PH13 | Total/NA | Solid | 5035 | |
| 890-585-2 | PH13A | Total/NA | Solid | 5035 | |
| 890-585-3 | PH14 | Total/NA | Solid | 5035 | |
| 890-585-4 | PH14A | Total/NA | Solid | 5035 | |
| 890-585-5 | PH15 | Total/NA | Solid | 5035 | |
| 890-585-6 | PH15A | Total/NA | Solid | 5035 | |
| 890-585-7 | PH16 | Total/NA | Solid | 5035 | |
| 890-585-8 | PH16A | Total/NA | Solid | 5035 | |
| 890-585-9 | PH17 | Total/NA | Solid | 5035 | |
| 890-585-10 | PH17A | Total/NA | Solid | 5035 | |
| 890-585-11 | PH18 | Total/NA | Solid | 5035 | |
| 890-585-12 | PH18A | Total/NA | Solid | 5035 | |
| 890-585-13 | PH19 | Total/NA | Solid | 5035 | |
| 890-585-14 | PH19A | Total/NA | Solid | 5035 | |
| 890-585-15 | PH20 | Total/NA | Solid | 5035 | |
| 890-585-16 | PH20A | Total/NA | Solid | 5035 | |
| MB 880-2461/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-2461/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-2461/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 890-585-1 MS | PH13 | Total/NA | Solid | 5035 | |
| 890-585-1 MSD | PH13 | Total/NA | Solid | 5035 | |

Analysis Batch: 2544

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 890-585-1 | PH13 | Total/NA | Solid | 8021B | 246 |
| 890-585-2 | PH13A | Total/NA | Solid | 8021B | 2461 |
| 890-585-3 | PH14 | Total/NA | Solid | 8021B | 2461 |
| 890-585-4 | PH14A | Total/NA | Solid | 8021B | 2461 |
| 890-585-5 | PH15 | Total/NA | Solid | 8021B | 2461 |
| 890-585-6 | PH15A | Total/NA | Solid | 8021B | 2461 |
| 890-585-7 | PH16 | Total/NA | Solid | 8021B | 2461 |
| 890-585-8 | PH16A | Total/NA | Solid | 8021B | 2461 |
| 890-585-9 | PH17 | Total/NA | Solid | 8021B | 2461 |
| 890-585-10 | PH17A | Total/NA | Solid | 8021B | 2461 |
| 890-585-11 | PH18 | Total/NA | Solid | 8021B | 2461 |
| 890-585-12 | PH18A | Total/NA | Solid | 8021B | 2461 |
| 890-585-13 | PH19 | Total/NA | Solid | 8021B | 2461 |
| 890-585-14 | PH19A | Total/NA | Solid | 8021B | 2461 |
| 890-585-15 | PH20 | Total/NA | Solid | 8021B | 2461 |
| 890-585-16 | PH20A | Total/NA | Solid | 8021B | 2461 |
| MB 880-2461/5-A | Method Blank | Total/NA | Solid | 8021B | 2461 |
| LCS 880-2461/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 2461 |
| LCSD 880-2461/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 2461 |
| 890-585-1 MS | PH13 | Total/NA | Solid | 8021B | 2461 |
| 890-585-1 MSD | PH13 | Total/NA | Solid | 8021B | 2461 |

GC Semi VOA

Prep Batch: 2476

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|-------------|------------|
| 890-585-1 | PH13 | Total/NA | Solid | 8015NM Prep | |

QC Association Summary

Client: WSP USA Inc. Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

GC Semi VOA (Continued)

Prep Batch: 2476 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|-------------|------------|
| 890-585-2 | PH13A | Total/NA | Solid | 8015NM Prep | |
| 890-585-5 | PH15 | Total/NA | Solid | 8015NM Prep | |
| 890-585-6 | PH15A | Total/NA | Solid | 8015NM Prep | |
| 890-585-7 | PH16 | Total/NA | Solid | 8015NM Prep | |
| 890-585-8 | PH16A | Total/NA | Solid | 8015NM Prep | |
| 890-585-9 | PH17 | Total/NA | Solid | 8015NM Prep | |
| 890-585-10 | PH17A | Total/NA | Solid | 8015NM Prep | |
| 890-585-11 | PH18 | Total/NA | Solid | 8015NM Prep | |
| 890-585-12 | PH18A | Total/NA | Solid | 8015NM Prep | |
| 890-585-13 | PH19 | Total/NA | Solid | 8015NM Prep | |
| 890-585-14 | PH19A | Total/NA | Solid | 8015NM Prep | |
| 890-585-15 | PH20 | Total/NA | Solid | 8015NM Prep | |
| 890-585-16 | PH20A | Total/NA | Solid | 8015NM Prep | |
| MB 880-2476/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-2476/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-2476/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-585-1 MS | PH13 | Total/NA | Solid | 8015NM Prep | |
| 890-585-1 MSD | PH13 | Total/NA | Solid | 8015NM Prep | |

Analysis Batch: 2591

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 890-585-1 | PH13 | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-2 | PH13A | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-5 | PH15 | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-6 | PH15A | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-7 | PH16 | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-8 | PH16A | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-9 | PH17 | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-10 | PH17A | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-11 | PH18 | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-12 | PH18A | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-13 | PH19 | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-14 | PH19A | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-15 | PH20 | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-16 | PH20A | Total/NA | Solid | 8015B NM | 2476 |
| MB 880-2476/1-A | Method Blank | Total/NA | Solid | 8015B NM | 2476 |
| LCS 880-2476/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 2476 |
| LCSD 880-2476/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-1 MS | PH13 | Total/NA | Solid | 8015B NM | 2476 |
| 890-585-1 MSD | PH13 | Total/NA | Solid | 8015B NM | 2476 |

Prep Batch: 2705

| Lab Sample ID MB 880-2705/1-A | Client Sample ID Method Blank | Prep Type Total/NA | Matrix Solid | Method 8015NM Prep | Prep Batch |
|----------------------------------|--------------------------------|--------------------|-----------------|-----------------------|------------|
| LCS 880-2705/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-2705/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

Analysis Batch: 2715

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|----------|------------|
| MB 880-2705/1-A | Method Blank | Total/NA | Solid | 8015B NM | 2705 |
| LCS 880-2705/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 2705 |

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QC Association Summary

Client: WSP USA Inc.

Project/Site: Wolverine SWD Riser

Job ID: 890-585-1 SDG: TE012920091

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GC Semi VOA (Continued)

Analysis Batch: 2715 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| LCSD 880-2705/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 2705 |

Prep Batch: 2771

| Lab Sample ID 890-585-3 | Client Sample ID PH14 | Prep Type Total/NA | Matrix Solid | Method Prep | Batch |
|-----------------------------------|------------------------|--------------------|-----------------|-------------|-------|
| 890-585-4 | PH14A | Total/NA | Solid | 8015NM Prep | |
| MB 880-2771/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-2771/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-2771/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

Analysis Batch: 2795

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 890-585-3 | PH14 | Total/NA | Solid | 8015B NM | 2771 |
| 890-585-4 | PH14A | Total/NA | Solid | 8015B NM | 2771 |
| MB 880-2771/1-A | Method Blank | Total/NA | Solid | 8015B NM | 2771 |
| LCS 880-2771/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 2771 |
| LCSD 880-2771/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 2771 |

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Leach Batch: 2479

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 890-585-8 | PH16A | Soluble | Solid | DI Leach | |
| 890-585-9 | PH17 | Soluble | Solid | DI Leach | |
| 890-585-10 | PH17A | Soluble | Solid | DI Leach | |
| MB 880-2479/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-2479/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-2479/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |

Leach Batch: 2488

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 890-585-1 | PH13 | Soluble | Solid | DI Leach | |
| 890-585-2 | PH13A | Soluble | Solid | DI Leach | |
| 890-585-3 | PH14 | Soluble | Solid | DI Leach | |
| 890-585-4 | PH14A | Soluble | Solid | DI Leach | |
| 890-585-5 | PH15 | Soluble | Solid | DI Leach | |
| 890-585-6 | PH15A | Soluble | Solid | DI Leach | |
| 890-585-7 | PH16 | Soluble | Solid | DI Leach | |
| 890-585-13 | PH19 | Soluble | Solid | DI Leach | |
| 890-585-14 | PH19A | Soluble | Solid | DI Leach | |
| 890-585-15 | PH20 | Soluble | Solid | DI Leach | |
| 890-585-16 | PH20A | Soluble | Solid | DI Leach | |
| MB 880-2488/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-2488/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-2488/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-585-7 MS | PH16 | Soluble | Solid | DI Leach | |
| 890-585-7 MSD | PH16 | Soluble | Solid | DI Leach | |

Leach Batch: 2494

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 890-585-11 | PH18 | Soluble | Solid | DI Leach | |

Eurofins Xenco, Carlsbad

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QC Association Summary

Client: WSP USA Inc. Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

HPLC/IC (Continued)

Leach Batch: 2494 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 890-585-12 | PH18A | Soluble | Solid | DI Leach | |
| MB 880-2494/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-2494/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-2494/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |

Analysis Batch: 2498

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 890-585-8 | PH16A | Soluble | Solid | 300.0 | 2479 |
| 890-585-9 | PH17 | Soluble | Solid | 300.0 | 2479 |
| 890-585-10 | PH17A | Soluble | Solid | 300.0 | 2479 |
| MB 880-2479/1-A | Method Blank | Soluble | Solid | 300.0 | 2479 |
| LCS 880-2479/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 2479 |
| LCSD 880-2479/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 2479 |

Analysis Batch: 2512

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 890-585-1 | PH13 | Soluble | Solid | 300.0 | 2488 |
| 890-585-2 | PH13A | Soluble | Solid | 300.0 | 2488 |
| 890-585-3 | PH14 | Soluble | Solid | 300.0 | 2488 |
| 890-585-4 | PH14A | Soluble | Solid | 300.0 | 2488 |
| 890-585-5 | PH15 | Soluble | Solid | 300.0 | 2488 |
| 890-585-6 | PH15A | Soluble | Solid | 300.0 | 2488 |
| 890-585-7 | PH16 | Soluble | Solid | 300.0 | 2488 |
| 890-585-13 | PH19 | Soluble | Solid | 300.0 | 2488 |
| 890-585-14 | PH19A | Soluble | Solid | 300.0 | 2488 |
| 890-585-15 | PH20 | Soluble | Solid | 300.0 | 2488 |
| 890-585-16 | PH20A | Soluble | Solid | 300.0 | 2488 |
| MB 880-2488/1-A | Method Blank | Soluble | Solid | 300.0 | 2488 |
| LCS 880-2488/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 2488 |
| LCSD 880-2488/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 2488 |
| 890-585-7 MS | PH16 | Soluble | Solid | 300.0 | 2488 |
| 890-585-7 MSD | PH16 | Soluble | Solid | 300.0 | 2488 |

Analysis Batch: 2660

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 890-585-11 | PH18 | Soluble | Solid | 300.0 | 2494 |
| 890-585-12 | PH18A | Soluble | Solid | 300.0 | 2494 |
| MB 880-2494/1-A | Method Blank | Soluble | Solid | 300.0 | 2494 |
| LCS 880-2494/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 2494 |
| LCSD 880-2494/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 2494 |

Project/Site: Wolverine SWD Riser

SDG: TE012920091

Client Sample ID: PH13

Client: WSP USA Inc.

Lab Sample ID: 890-585-1

Matrix: Solid

Date Collected: 04/27/21 09:29 Date Received: 04/27/21 15:05

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 14:34 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 13:05 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2488 | 04/29/21 11:24 | SC | XM |
| Soluble | Analysis | 300.0 | | 1 | 2512 | 04/29/21 22:33 | SC | XM |

Lab Sample ID: 890-585-2

Matrix: Solid

Date Collected: 04/27/21 09:37 Date Received: 04/27/21 15:05

Client Sample ID: PH13A

| | Batch | Batch | Dilution Bate | | Batch | Prepared | | |
|-----------|----------|-------------|---------------|--------|--------|----------------|---------|-----|
| Prep Type | Туре | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 14:54 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 14:09 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2488 | 04/29/21 11:24 | SC | XM |
| Soluble | Analysis | 300.0 | | 1 | 2512 | 04/29/21 22:48 | SC | XM |

Lab Sample ID: 890-585-3 **Client Sample ID: PH14** Date Collected: 04/27/21 09:46

Matrix: Solid

Date Received: 04/27/21 15:05

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Туре | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 15:15 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2771 | 05/06/21 11:32 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2795 | 05/07/21 05:56 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2488 | 04/29/21 11:24 | SC | XM |
| Soluble | Analysis | 300.0 | | 1 | 2512 | 04/29/21 22:54 | SC | XM |

Client Sample ID: PH14A Lab Sample ID: 890-585-4 Date Collected: 04/27/21 09:50 Matrix: Solid

Date Received: 04/27/21 15:05

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Туре | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 15:35 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2771 | 05/06/21 11:32 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2795 | 05/07/21 06:17 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2488 | 04/29/21 11:24 | SC | XM |
| Soluble | Analysis | 300.0 | | 1 | 2512 | 04/29/21 22:59 | SC | XM |

Project/Site: Wolverine SWD Riser

Client: WSP USA Inc.

Lab Sample ID: 890-585-5

Matrix: Solid

Client Sample ID: PH15 Date Collected: 04/27/21 10:04

Date Received: 04/27/21 15:05

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 16:33 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 15:14 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2488 | 04/29/21 11:24 | SC | XM |
| Soluble | Analysis | 300.0 | | 1 | 2512 | 04/29/21 23:04 | SC | XM |

Lab Sample ID: 890-585-6

Matrix: Solid

Date Collected: 04/27/21 10:09 Date Received: 04/27/21 15:05

Client Sample ID: PH15A

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 16:54 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 15:35 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2488 | 04/29/21 11:24 | SC | XM |
| Soluble | Analysis | 300.0 | | 1 | 2512 | 04/29/21 23:09 | SC | XM |

Lab Sample ID: 890-585-7 **Client Sample ID: PH16** Date Collected: 04/27/21 10:22

Matrix: Solid

Date Received: 04/27/21 15:05

| _ | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 17:14 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 15:56 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2488 | 04/29/21 11:24 | SC | XM |
| Soluble | Analysis | 300.0 | | 5 | 2512 | 04/29/21 23:14 | SC | XM |

Client Sample ID: PH16A Lab Sample ID: 890-585-8 Date Collected: 04/27/21 10:27 Matrix: Solid

Date Received: 04/27/21 15:05

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 17:34 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 16:18 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2479 | 04/29/21 10:46 | SC | XM |
| Soluble | Analysis | 300.0 | | 10 | 2498 | 04/29/21 15:49 | SC | XM |

Project/Site: Wolverine SWD Riser

SDG: TE012920091

Client Sample ID: PH17

Client: WSP USA Inc.

Lab Sample ID: 890-585-9

Matrix: Solid

Date Collected: 04/27/21 10:41 Date Received: 04/27/21 15:05

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 17:55 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 16:39 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2479 | 04/29/21 10:46 | SC | XM |
| Soluble | Analysis | 300.0 | | 1 | 2498 | 04/29/21 15:55 | SC | XM |

Lab Sample ID: 890-585-10

Client Sample ID: PH17A Date Collected: 04/27/21 10:44 Date Received: 04/27/21 15:05

Matrix: Solid

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 18:15 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 17:00 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2479 | 04/29/21 10:46 | SC | XM |
| Soluble | Analysis | 300.0 | | 1 | 2498 | 04/29/21 16:00 | SC | XM |

Lab Sample ID: 890-585-11 **Client Sample ID: PH18** Date Collected: 04/27/21 10:59

Matrix: Solid

Date Received: 04/27/21 15:05

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 19:37 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 17:43 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2494 | 04/29/21 11:41 | СН | XM |
| Soluble | Analysis | 300.0 | | 1 | 2660 | 05/04/21 04:11 | WP | XM |

Client Sample ID: PH18A Lab Sample ID: 890-585-12 Date Collected: 04/27/21 11:02 Matrix: Solid

Date Received: 04/27/21 15:05

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 19:58 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 18:04 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2494 | 04/29/21 11:41 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 2660 | 05/04/21 04:16 | WP | XM |

Client Sample ID: PH19

Lab Sample ID: 890-585-13

Matrix: Solid

Date Collected: 04/27/21 12:15 Date Received: 04/27/21 15:05

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 20:18 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 18:25 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2488 | 04/29/21 11:24 | SC | XM |
| Soluble | Analysis | 300.0 | | 1 | 2512 | 04/29/21 23:30 | SC | XM |

Client Sample ID: PH19A Lab Sample ID: 890-585-14 Date Collected: 04/27/21 12:19

Date Received: 04/27/21 15:05

Matrix: Solid

Batch Batch Dilution Batch **Prepared** Method **Prep Type** Type Run **Factor** Number or Analyzed Analyst Lab Total/NA Prep 5035 2461 04/29/21 10:36 KL XM Total/NA 8021B XM 2544 04/30/21 20:38 KL Analysis 1 Total/NA Prep 8015NM Prep 2476 04/29/21 10:18 DM XM Total/NA Analysis 8015B NM 2591 05/01/21 18:46 AJ XM1 Soluble Leach DI Leach 2488 04/29/21 11:24 SC ΧM XM Soluble Analysis 300.0 1 2512 04/29/21 23:35 SC

Client Sample ID: PH20 Lab Sample ID: 890-585-15

Date Collected: 04/27/21 12:33 **Matrix: Solid**

Date Received: 04/27/21 15:05

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Туре | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 20:59 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 19:07 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2488 | 04/29/21 11:24 | SC | XM |
| Soluble | Analysis | 300.0 | | 1 | 2512 | 04/29/21 23:51 | SC | XM |

Lab Sample ID: 890-585-16 **Client Sample ID: PH20A**

Date Collected: 04/27/21 12:37 Date Received: 04/27/21 15:05

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|-------------|-----|----------|--------|----------------|---------|-----|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 2461 | 04/29/21 10:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 2544 | 04/30/21 21:19 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 2476 | 04/29/21 10:18 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 2591 | 05/01/21 19:28 | AJ | XM |
| Soluble | Leach | DI Leach | | | 2488 | 04/29/21 11:24 | SC | XM |
| Soluble | Analysis | 300.0 | | 1 | 2512 | 04/30/21 12:45 | SC | XM |

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-585-1 Project/Site: Wolverine SWD Riser SDG: TE012920091

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Pr | ogram | Identification Number | Expiration Date |
|---|----------------------|--|--|---------------------------------------|
| Texas | NE | ELAP | T104704400-20-21 | 06-30-21 |
| T | | | | |
| the following analytes the agency does not d | • | ort, but the laboratory is r | not certified by the governing authority. | I his list may include analytes for v |
| | • | ort, but the laboratory is r Matrix | not certified by the governing authority. Analyte | This list may include analytes for v |
| the agency does not o | offer certification. | • | , , , | This list may include analytes for v |

Method Summary

Client: WSP USA Inc.

Method

8015B NM

8015NM Prep

DI Leach

8021B

300.0

5035

Project/Site: Wolverine SWD Riser

Method Description

Microextraction

Volatile Organic Compounds (GC)

Anions, Ion Chromatography

Closed System Purge and Trap

Diesel Range Organics (DRO) (GC)

Deionized Water Leaching Procedure

Job ID: 890-585-1

SDG: TE012920091

| Protocol | Laboratory |
|----------|------------|
| SW846 | XM |
| SW846 | XM |
| MCAWW | XM |
| SW846 | XM |

XM

XM

SW846

ASTM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Collected

04/27/21 11:02 04/27/21 15:05 - 5.5

04/27/21 12:19 04/27/21 15:05 - 5.5

04/27/21 12:33 04/27/21 15:05 - 4.5

04/27/21 12:37 04/27/21 15:05 - 5.5

- 4.5

04/27/21 12:15 04/27/21 15:05

Matrix

Solid

Client: WSP USA Inc.

Lab Sample ID

890-585-1

890-585-2

890-585-3

890-585-4

890-585-5

890-585-6

890-585-7

890-585-8

890-585-9

890-585-10

890-585-11

890-585-12

890-585-13

890-585-14

890-585-15 890-585-16

Project/Site: Wolverine SWD Riser

PH13

PH13A

PH14

PH14A

PH15A

PH16A

PH17

PH17A

PH18

PH18A

PH19

PH20

PH20A

PH19A

PH16

PH15

Client Sample ID

Job ID: 890-585-1 SDG: TE012920091

Received Depth 04/27/21 09:29 04/27/21 15:05 - 4.5 04/27/21 09:37 04/27/21 15:05 - 5.5 04/27/21 09:46 04/27/21 15:05 - 4.5 04/27/21 09:50 04/27/21 15:05 - 5.5 04/27/21 10:04 04/27/21 15:05 - 4.5 04/27/21 10:09 04/27/21 15:05 - 5.5 04/27/21 10:22 04/27/21 15:05 04/27/21 10:27 04/27/21 15:05 - 5.5 04/27/21 10:41 04/27/21 15:05 04/27/21 10:44 04/27/21 15:05 - 5.5 04/27/21 10:59 04/27/21 15:05 - 4.5

| < BTE | s 4/27/2021 9:50 5.5' 1 x x | s 4/27/2021 10:04 4.5' 1 x x | s 4/27/2021 10:09 5.5' 1 x x | s 4/27/2021 10:22 4.5' 1 x x | s 4/27/2021 10:27 5.5° 1 x x | s 4/27/2021 10:41 4.5: 1 v v | | s 4/27/2021 10:44 5.5' 1 x x | 200.8 / 6020: 8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni | PH17A s 4/27/2021 10:44 5.5' 1 x x x x x x x x 1 Al State of the state | S 4/27/2021 10:44 5.5' 1 X X X X 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cnd Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb-1 and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontract only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such loss 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 in the sample submitted to Xenco, but not analyzed. These terms will in the sample submitted to Xenco, but not analyzed. These terms will in the sample submitted to Xenco, but not analyzed. | B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo 2d Cr Co Cu Pb Mn Mo Ni Se Ag Ti to 2d Cr Co Cu Pb Mn Mo Ni Se Ag Ti to 3d Cr Co Cu Pb Mn Mo Ni Se Ag Ti t |
|------------------------------|-------------------------------|---|---|--|---|--|---|---|--|--|--|--|
| Comple | Sample C Disc Disc Disc | Sample Comments Discrete Discrete Discrete Discrete | Sample Comm Discrete Discrete Discrete Discrete Discrete | Sample Comn Discrete Discrete Discrete Discrete Discrete Discrete | Sample Comn Discrete Discrete Discrete Discrete Discrete Discrete Discrete Discrete Discrete | Sample Comn Discrete Discre | Sample Comm Discrete | Sample Comm Discrete | Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na | g SiO2 N | ie Ag SiO2 Na Itons | tions ontrol |
| | s 4/27/2021 9:46 4.5' 1 x x x | s 4/27/2021 9:46 4.5' 1 x x x x x x x x x x x x x x x x x x | s 4/27/2021 9:46 4.5' 1 x x x x x x x x x x x x x x x x x x | s 4/27/2021 9:46 4.5' 11 x x x x x x x x x x x x x x x x x x | \$ 4/27/2021 9:46 4.5' 11 x x x x x x x x x x x x x x x x x x | s 4/27/2021 9:46 4.5' 1 x x x s 4/27/2021 9:50 5.5' 1 x x x s 4/27/2021 10:04 4.5' 1 x x x s 4/27/2021 10:09 5.5' 1 x x x s 4/27/2021 10:22 4.5' 1 x x x s 4/27/2021 10:27 5.5' 1 x x x | \$ 4/27/2021 9:46 4.5' 11 x x x x x x x x x x x x x x x x x x | S 4/27/2021 9:46 4.5' 1 x x x S 4/27/2021 9:50 5.5' 1 x x x S 4/27/2021 10:04 4.5' 1 x x x S 4/27/2021 10:09 5.5' 1 x x x S 4/27/2021 10:22 4.5' 1 x x x S 4/27/2021 10:27 5.5' 1 x x x S 4/27/2021 10:41 4.5' 1 x x x S 4/27/2021 10:41 4.5' 1 x x x S 4/27/2021 10:44 5.5' 1 x x x | S 4/27/2021 9:46 4.5' 11 x x x x x x x x x x x x x x x x x x | B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 | B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 A Cr Co Cu Pb Mn Mo Ni Se Ag Ti U affiliates and subcontractors. It assigns standard terms and conditions by the client if such losses are due to circumstances beyond the control nalyzed. These terms will be enforced unless previously negotiated. | S 4/27/2021 9:46 4.5' 1 X X X X X X X X X |
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Relinquished by: (Signature)

Received by (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date 051418 Rev 2018 :

13

Chain of Custody

Work Order No:

| | | - | | | | | | | |
|--|--|--|---------------------------------------|-------------------------------------|---|---|--|--|--|
| tors. It assigns standard terms and conditions ses are due to circumstances beyond the control be enforced unless previously negotiated. | gnature 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. 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 A minimum charge 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. | (enco, its aff s incurred b but not anal | npany to) ir expense to Xenco, | n client co | Id purchase order fror ny responsibility for a of \$5 for each sample | mpies constitutés a va and shall not assume a ch project and a charge | d relinquishment of san In the cost of samples a D will be applied to eacl | re of this document ar co will be liable only f nimum charge of \$75.0 | Notice: Signature of this doc of service. Xenco will be list of Xenco. A minimum charg |
| Se Ag TI U 1631/245.1/7470/7471: Hg | Cr Co Cu Pb Mn Mo Ni Se | Ba Be Cd Cr | Sb As Ba | 11 | TCLP / SPLP 6010: 8RCRA | | Circle Method(s) and Metal(s) to be analyzed | Method(s) and Me | Circle I |
| Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn | Cd Ca Cr Co Cu Fe Pb Mg | Ba Be B | Sb As E | ≥ | 13PPM Texas 11 | 8RCRA | 200.8 / 6020: | 200.7 / 6010 20 | Total 2 |
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| Discrete | | × | × | | 5.5' | 4/27/2021 12:37 | s 4/2 | PH20A | |
| Discrete | | × | × | | 4.5 | 4/27/2021 12:33 | s 4/2 | PH20 | |
| Discrete | | × | × | | 5.5' | 4/27/2021 12:19 | s 4/2 | PH19A | |
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| Discrete | | × | × | | 5.5 | 4/27/2021 11:02 | s 4/2 | PH18A | |
| Discrete | | × | × | | 4.5 | 4/27/2021 10:59 | s 4/; | PH18 | |
| Sample Comments | | Chlorid | TPH (EI | Numb | ed Depth | Date Time Sampled Sampled | Matrix S | Sample Identification | Sam |
| lab, if received by 4:30pm | | e (El | | | ers: | Total Containers | No N/A | tody Seals: Yes | Sample Custody Seals |
| TAT starts the day recevied by the | | PA 3 | | | tor: | Correction Factor: | Yes No N/A | L | Cooler Custody Seals |
| | | 00.0 | 021) | nta | | しま | Yes No | tact: | Received Intact: |
| | |)) ——— | | iner | eter ID | The mometer ID | | e (°C): | Temperature (°C): |
| | | | | 3 | Lee: Yes No | Yes No Wet Lee: | Temp Blank: Y | SAMPLE RECEIPT | SAMPLE |
| Incident Number:NRM2016460654 | | | · | | Due Date: | | William Mather | ame: | Sampler's Name |
| Cost center 1083761001 | | | | | Rush: | R | Eddy | 15. | P.O. Number: |
| AFE: EW.2020.03865.EXP.01 | | | | | Routine (| | TE012920091 | ber | Project Number: |
| T Work Order Notes | ANALYSIS REQUEST | | | | Turn Around | Riser | Wolverine SWD Riser | le: | Project Name: |
| Deliverables: EDD ADaPT Other: | | r@wsp.co | dan.moi | /sp.com, | Email: will.mather@wsp.com, dan.moir@wsp.com | En | 3849 | (432) 236-3849 | Phone: |
| Reporting:Level III | | | | | City, State ZIP: | | Midland, Tx 79705 | | City, State ZIP: |
| | | | | | Address: | | 3300 North A Street | 3300 No | Address: |
| Program: UST/PST □RP □rownfields □RC □perfund □ | | ¥ | XTO Energy | | Company Name | ffice | WSP USA Inc., Permian office | | Company Name: |
| Work Order Comments | | | Kyle Littrell | | Bill to: (if different) | | | ager: Dan Moir | Project Manager: |
| 0-2000) www.xenco.com Page 2 of 2 | Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) |) 902-0300 915)585-34 Atlanta,GA | s,TX (214) baso,TX (9) 55-0900) | 200 Dalla: 440) ELF AZ (480-3 | ston,TX (281) 240-4; idland,TX (432-704-5 -392-7550) Phoenix, | Hou M Hobbs,NM (575 | | LABORATOR | (|
| | | | | | | | | | |

Eurofins Xenco, Carlsbad 1089 N Canal St.

Chain of Custody Record

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💸 eurofins

Environment Testing America

| Carlsbad, NM 88220 Phone 575-988-3199 Fax 575-988-3199 | • | Ì | | custody Record | ecoru | | | | | | | | | | | America | |
|--|---|---|--|--|--|----------------------------|------------------------------|---------------------------|-------------------------|------------------------------------|---------------------|---------------------|-------------------|---|---|--|-------|
| Client Information (Sub Contract Lab) | Sampler | | | Lab PM Krame | Lab PM Kramer, Jessica | | | | Carrier | Carrier Tracking No(s): | No(s): | į | | 89 00 00 | COC No: 890-188 1 | Manage of the state of the stat | |
| - 1 | Phone: | | | E-Mail lessio | E-Mail Essica kramer@eurofinset.com | eurofins | et com | | State | State of Origin | | | | Page: | Page: | | |
| Company Eurofins Xenco | | | | | Accreditations Required (See note). NELAP - Louisiana, NELAP - | Required Juisiana, | (See note). | le). P - Texas | ŀ | | | | | # doc | Job#: 890-585-1 | | |
| Address. 1211 W Florida Ave | Due Date Requested 5/3/2021 | ď | | | | | Analı | alysis Requested | ques | e | | | l | Pre | on Coc | des | |
| City Midland | TAT Requested (days). | ys). | | | | | | | | - | | - | | ∩ œ > | | M Hexane N - None | ***** |
| State, Zip TX, 79701 | | | | - | | | | | | | | | | m D C | D Nitric Acid E NaHSO4 | P - Na2O4S Q Na2SO3 | |
| Phone 432-704-5440(Tel) | PO# | | | | | le | | | | | | · | 1.75 | G F | | R Na2S2O3 S - H2SO4 | |
| Email | WO# | | | | lo) | Chloric | | | | | , | | s · | | lce DI Water | U Acetone V-MCAA | |
| Project Name: Wolverine SWD Riser | Project #: 89000004 | | | | s or N | | | | | | | | ainer | <u>_</u> _ × | | W pH 4-5 Z other (specify) | |
| Site: | SSOW#: | | | | SD (Ye | | | | | | | | of con | Other: | er. | | |
| | | Sample | Sample Type (C=comp, | Matrix (w=water S=solid, | ld Filtered : form MS/M 5MOD_NM/8 | _ORGFM_28 1B/6036FP_0 | | | | | | | al Number | I | | | |
| | Our pare | | Preservation Code: | Geliele - | X.F | 5003 | | | | 4 | 1 | 4 | X T | | opecial if | Special instructions/Note. | |
| PH13 (890-585-1) | 4/27/21 | 09 29 Mountain | | Solid | × | × | 8 | | 2 200 | ST con- | 2 | i i | _ | | | St Proceedings of the Participant Control of | b |
| PH13A (890-585-2) | 4/27/21 | 09 37 Mountain | | Solid | × | × | | | | | | | _ | | | | |
| PH14 (890-585-3) | 4/27/21 | 09 46 Mountain | | Solid | × | × | | | | | | | _ | | | | |
| PH14A (890-585-4) | 4/27/21 | 09 50 Mountain | | Solid | × | × | | | | | | | _ | | | | |
| PH15 (890-585-5) | 4/27/21 | 10 04 Mountain | | Solid | × | × | | | | | | | ٠. | | | | |
| PH15A (890-585-6) | 4/27/21 | 10 09 Mountain | | Solid | × | × | | | | _ | | | ٠ | | | | |
| PH16 (890-585-7) | 4/27/21 | 10 22 Mountain | | Solid | × | × | | | | - | | _ | | | | Relation to the second | |
| PH16A (890-585-8) | 4/27/21 | 10 27 Mountain | | Solid | × | × | | | | | | | | | | | |
| PH17 (890-585-9) | 4/27/21 | 10 41 Mountain | | Solid | × | × | | | | | | | | EASHEG | | | |
| Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC. | places the ownership being analyzed the sa arn the signed Chain o | of method ana amples must be of Custody attes | llyte & accredit shipped back sting to said co | tation complian to the Eurofina mplicance to E | ce upon out s Xenco LLC I urofins Xenco | ubcontract aboratory of | laboratorie or other inst | s. This sa ructions wi | mple ship II be prov | ment is fided Ar | orwarde iy chang | d under es to ac | chain- credita | of-cus | stody If the lab | oratory does not currently brought to Eurofins Xenco | |
| Possible Hazard Identification Unconfirmed | | | | | Sample | Sample Disposal (A f | al (A fee Client | may be | asses: Dispos | assessed if san Disposal By Lab | ample | s are | retair | tained long Archive For | ee may be assessed if samples are retained longer than 1 month) Disposal By Lab Archive For Mont | 1 month) Months | |
| Deliverable Requested I II III IV Other (specify) | Primary Deliverable Rank | ıble Rank 2 | | | Special Instructions/QC | Instruction | | Requirements | ents. | | | | | | | | |
| Empty Kit Relinquished by | | Date | | | Time | , | | | | Method of Shipment: | f Shipm | ent: | | *************************************** | | | |
| Reinquished by Clor Court 4.28-2 | Date/Time: | | C | Company | Regeives | My hall | M | S | /- | | Date/T | Date/Time U-23 | 77 | (| MODIL | Company | |
| Relinquished by | Date/Time: | | 0 | Company | Réce | Réceived by: | 11:0 | | | | Date/Time!* | Time! | 9 | , | | Company | |
| J | Date/Time: | | 0 | Company | Rece | Received by: | | | | | Date/Time | īme: | | | | Company | |
| Custody Seals Intact: Custody Seal No A Yes A No | | | | | Cool | Cooler Temperature(s) | | C and Other Remarks | Remarks | | | | | | | | |
| | | | | | | | | | | | | | | | | Ver: 11/01/2020 | L |

Order Completion Information

Cloe Clifton

Tracking #

Sent Date Sent Via

Filled by Creator

Lot #

Comments

Sample Type

Matrix

Method

Preservative

Bottle Type Description

δ

Bottles/Set

Comment

Health and Safety Notes: Preservative

Scan QR code for field

sampler instructions

Drinted on AIDOIDONA O AO EEARIR

13

Seal# Seal# Seal# Seal# Seal#

Time <u>m</u> Date Date Please no Please no Control (Rev. 1) Relinquished By/

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Company

Received By

Company

Received By

4/28/2021 11:59:00PM

Ready To Process

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-585-1

SDG Number: TE012920091

Login Number: 585 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

| Question | Answer | Comment |
|--|--------|---------|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

Euronnis Carisbau

Released to Imaging: 7/13/2021 11:08:53 AM

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14

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-585-1

SDG Number: TE012920091

List Source: Eurofins Midland
List Number: 2
List Creation: 04/28/21 04:06 PM

Creator: Copeland, Tatiana

| Question | Answer | Comment |
|--|--------|---------|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is | True | |

<6mm (1/4").

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 31715

CONDITIONS

| Operator: | OGRID: |
|------------------------|---|
| XTO ENERGY, INC | 5380 |
| 6401 Holiday Hill Road | Action Number: |
| Midland, TX 79707 | 31715 |
| | Action Type: |
| | [C-141] Release Corrective Action (C-141) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|---|----------------|
| chensley | Due to special circumstances, variance to close incident is approved. | 7/13/2021 |