

JULY 1, 2020



SITE CHARACTERIZATION REPORT & PROPOSED WORK PLAN

SUNDOWN ENERGY, LP – CATENA LEASE – SOUTH VACUUM 27 #003

1RP-_____

Prepared by: Sport Environmental Services, LLC
www.sportenv.com
502 N. Big Spring Street, Midland, TX 79701
432-683-1100



July 1, 2020

Environmental Specialist Team
New Mexico Oil Conservation Division
District 1 (Hobbs)
1625 N. French Dr.
Hobbs, NM 88240

Re: Site Characterization Report and Proposed Work Plan
Sundown Energy, LP
Catena Lease – South Vacuum 27 #003
RP #: 1RP-_____
Approximate Geographic Coordinates: 32.71451°N, -103.43543°W
Closest Well API: 30-025-36891
Unit Letter I, Section 26, Township 18S, Range 35E
Lea County, New Mexico

Dear NMOCD Environmental Specialists:

Tomahawk Construction Resources, LLC by and through its subcontractor Sport Environmental Services, LLC is submitting, on behalf of Sundown Energy, LP (*Sundown* or *Client*), a Site Characterization Report and Proposed Work Plan for the Catena Lease – South Vacuum 27 #003 (*Catena Lease* or *subject site*) where a release of produced water occurred on a 3-inch poly-line froze due to low temperatures. The release was discovered on February 27, 2020 and NMOCD was immediately notified by Mr. Wes Able with Sundown. Mr. Able spoke over the phone with a representative from NMOCD and relayed his observations of the release. Ultimately, Mr. Able and the NMOCD representative estimated that approximately twenty (20) barrels of produced water were released. A brief summary of work that has taken place at the subject site to ensure that the impacts of the release are minimized is available below and a Site Characterization C-141 Form has been prepared which is available in **Attachment A**. Please note that the geographic coordinates associated with the site have been updated from those listed on the Initial C-141 to show the release location more accurately. At the time this report was prepared a remediation permit number had not yet been assigned to this release by NMOCD.

Executive Summary & Site History

The ground surface at the subject site is flat and consists of sandy soil in the top six to nine inches – these characteristics caused the produced water that was released to soak into the soil too quickly to be recovered. At approximately nine inches below ground surface (9”bgs) the soil is replaced by a hard and consistent rock layer which prevented further sampling with direct push technology and made excavation beyond 9-inches infeasible. As will be discussed further in this report, the rocky layer appears to have prevented the downward migration of the produced water and prevented chloride contamination. Soil sampling conducted shortly after the release confirmed that total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX) were not constituents of concern associated with the produced water and that only chlorides would require further analysis.

To ensure that any potential impact from the chlorides that were present in the produced water was mitigated, the client removed the sandy soil from within the release footprint and properly disposed of it at an

approved facility. Next, Sport Environmental returned to the subject site with a third-party environmental drilling company to conduct soil sampling via an air rotary rig. With the chloride-affected soil removed, it was possible to vertically delineate the release without creating potential conduits for migration of remaining chlorides. As will be detailed later in this report, the rocky layer appeared to have prevented the downward migration of chlorides and full vertical and horizontal delineation was achieved. Moreover, the results strongly indicate that impacts of the release were limited to approximately the top foot of soil within the release footprint most of which was removed and appropriately disposed of prior to commencement of the delineation work. Although some portions of the subject site exhibited chloride concentrations in excess of 600 mg/kg within the top four feet of the release footprint, the subject site's extensive rock layer makes removal of these portions infeasible and soil sampling indicates that the release does not appear to pose a risk to groundwater. In addition, sampling of horizontal points (e.g., HDP8-001 @ 10' bgs) outside of the release area suggests that some chloride concentrations of approximately 1,500 mg/kg may be naturally occurring and unrelated to this release.

Based on the results of this sampling, Sport Environmental, on behalf of the client, will be requesting the NMOCD approve plans to backfill the six-to-nine inch excavation within the release footprint with fresh soil and proceed with formal closure of this release. If NMOCD approves of this plan, final documentation will include a formal closure report, a Final C-141, and photographs of the backfilled excavation.

Site Assessment & Characterization

As part of site assessment and characterization of the site, aerial imagery was evaluated for the presence of major watercourses within a 0.5-mile radius of the release site. Aerial imagery demonstrating the absence of surface water within a 0.5-mile radius of the release site can be found within **Attachment B**.

A groundwater depth evaluation was performed as well. New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) sources were reviewed for groundwater depth information. The closest water wells with groundwater depth information showed that groundwater depth is approximately 57 to 60 feet below ground surface. Please see **Figure 1** below and **Attachment C** for the NMOSE Water Right Summary.

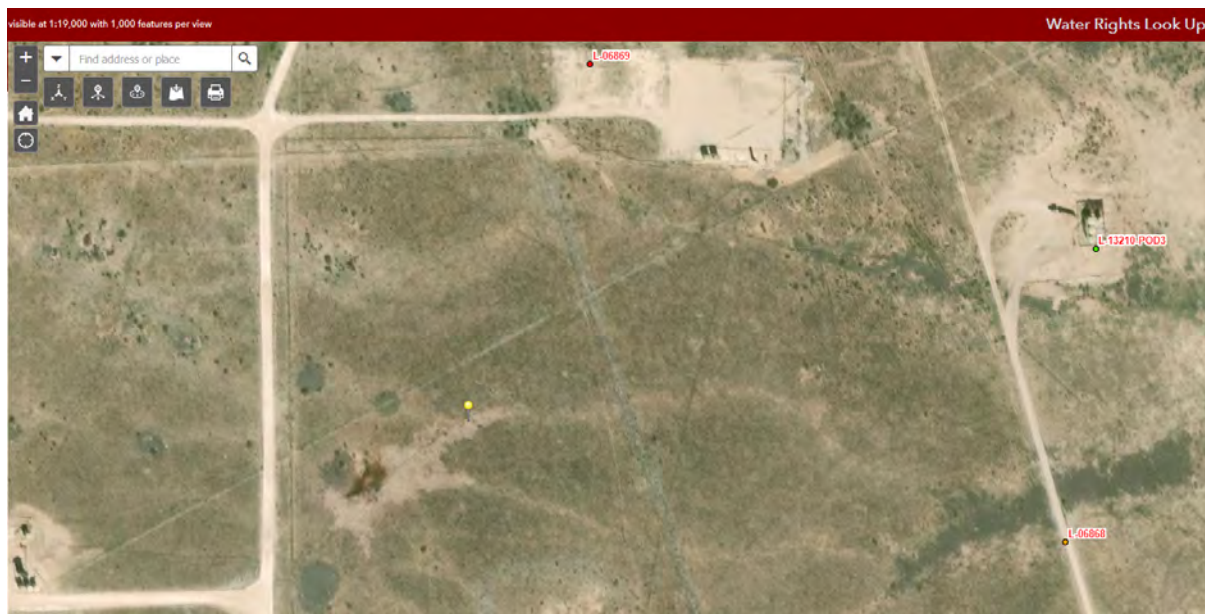


Figure 1 – NMOSE Water Rights Look Up

This query established groundwater depth at the site to be approximately 57 feet below ground surface (bgs). Therefore, the appropriate remediation standard as specified in the NMOCD Table 1 (NMAC 19.15.29.11) will be applied

Table 1: Site Closure Criteria (Adapted from NMOCD Table 1(NMAC 19.15.29.11))

Closure Criteria for Soils Impacted by a Release: Minimum depth below any point within the horizontal boundary of the release to groundwater is between 51 and 100 feet	
<i>Constituent</i>	<i>Limit (mg/Kg)</i>
Chloride	10,000
TPH (Total Petroleum Hydrocarbons) (GRO+DRO+MRO)	2,500
GRO + DRO	1,500
BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes)	50
Benzene	10

Initial Characterization

On March 25, 2020, initial release characterization by means of horizontal and vertical delineation sampling was performed. The release footprint was mapped with a GPS device to generate a Release Site Plan denoting sample location placement as shown in **Attachment D**. Upon arrival at the site, it was visually noted that soils had dried out since the last rainfall event making it possible to see visual indications of the release perimeter and to estimate its area (approximately 3.18 acres).

During sampling, a rocky layer and bedrock was encountered 9” below ground surface (bgs) resulting in an inability to perform additional depth sampling using the truck-mounted Geoprobe 540UD direct push unit. However, Sport Environmental successfully collected thirty-three (33) grab samples from the soil surface (0-9”bgs) while on location consisting of horizontal delineation samples and release footprint samples. These samples were delivered to Xenco Laboratories, a National Environmental Laboratory Accreditation Program (NELAP) Certified laboratory under proper chain-of-custody for processing and analysis. Each constituent was analyzed using appropriate analytical methods. Chlorides were analyzed using EPA Method 300, Total Petroleum Hydrocarbons (TPH) using Method 8015B, and BTEX constituents on the using Method 8260. The sampling confirmed BTEX constituents were not present in the produced water and did not impact the subject site. **Attachment E** contains the full analytical results including the chain-of-custody. Some of the surface samples indicated that TPH was present at the surface and that chlorides were present at concentrations exceeding 10,000 mg/kg, but the affected soil was removed and sent to an authorized facility for disposal. The site plan including sample locations is available in Figure 2 below.

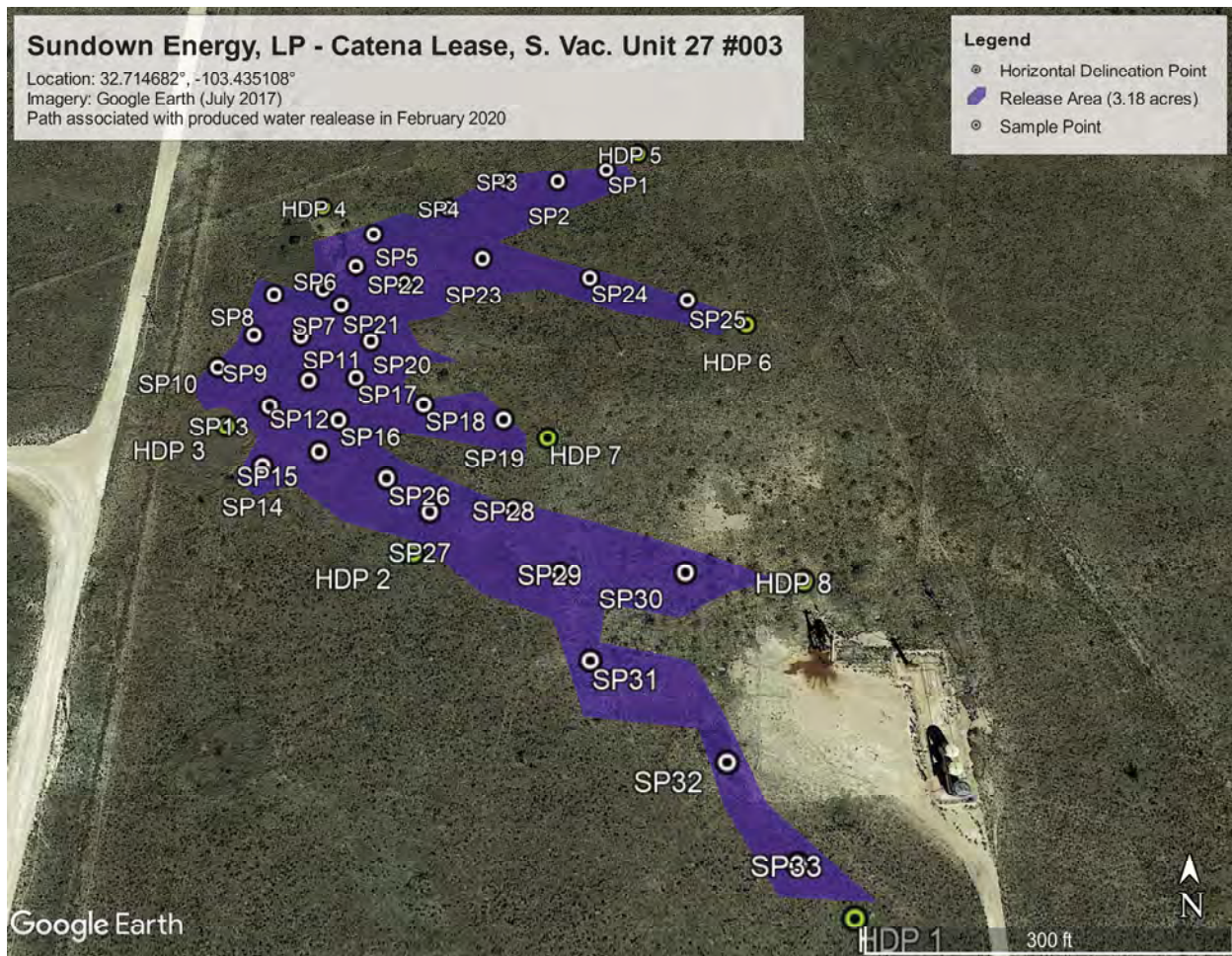


Figure 2 – Site Plan and Chloride Results – Sampled March 25, 2020

Full Delineation

On May 27, 2020, another round of soil sampling was conducted using an air rotary rig operated by Talon LPE. This round of sampling made it possible to bore through the bedrock layer. Each borehole conducted during this round of sampling was terminated at 20' bgs and the soil characteristics were similar throughout the samples. Lithology data (*i.e.*, boring log) representative of the subject site was generated for the Catena Lease and is available in **Attachment F**. Overall, the results strongly indicated that the rocky layer was protective of underlying soils. The full analytical report from this round of sampling is provided in **Attachment G** for reference. In addition, a site plan and a sample data summary are included on the following page for easy reference. **Attachment H** contains the same site plan and sample data summary in higher resolution for reference.

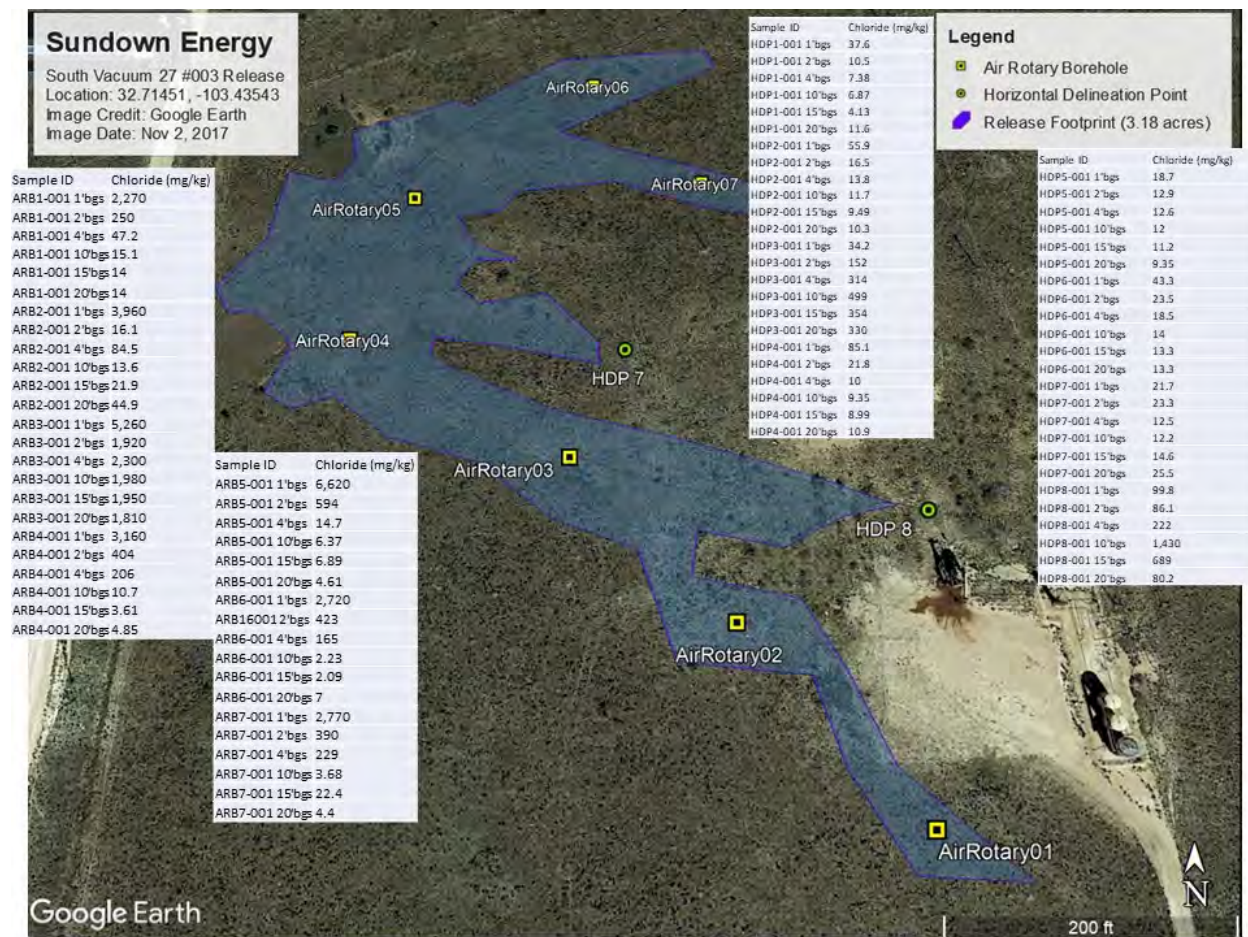


Figure 3 – Site Plan and Chloride Results – Sampled May 27, 2020

After the boreholes were drilled, they were filled with bentonite and sealed to prevent the creation of conduits for chlorides that were present at the surface (primarily at the one-foot below ground surface depth interval where the rocky layer begins). Air Rotary Borehole (ARB) location 3 had chloride concentrations of more than 1,000 mg/kg throughout the intervals sampled. However, it is worth noting that Horizontal Delineation Point (HDP) 8 shows a chloride concentration of 1,430 at ten feet below ground surface and the remaining intervals sampled at that location have significantly lower chloride concentrations. These results indicate that some of the chlorides observed below the surface may be naturally occurring or otherwise unrelated to the release. A summary table of the analytical results associated with this round of sampling is available on the following page as Table 2: Sample Data Summary for May 27, 2020 Soil Sampling Results.

Table 2: Sample Data Summary for May 27, 2020 Soil Sampling Results

Sundown Energy - Catena Lease South Vacuum 27 #003 Sample Data Summary for May 27, 2020 Soil Sampling Results			
Sample ID	Chloride (mg/kg)	Sample ID	Chloride (mg/kg)
ARB1-001 1'bgs	2,270	HDP1-001 1'bgs	37.6
ARB1-001 2'bgs	250	HDP1-001 2'bgs	10.5
ARB1-001 4'bgs	47.2	HDP1-001 4'bgs	7.38
ARB1-001 10'bgs	15.1	HDP1-001 10'bgs	6.87
ARB1-001 15'bgs	14	HDP1-001 15'bgs	4.13
ARB1-001 20'bgs	14	HDP1-001 20'bgs	11.6
ARB2-001 1'bgs	3,960	HDP2-001 1'bgs	55.9
ARB2-001 2'bgs	16.1	HDP2-001 2'bgs	16.5
ARB2-001 4'bgs	84.5	HDP2-001 4'bgs	13.8
ARB2-001 10'bgs	13.6	HDP2-001 10'bgs	11.7
ARB2-001 15'bgs	21.9	HDP2-001 15'bgs	9.49
ARB2-001 20'bgs	44.9	HDP2-001 20'bgs	10.3
ARB3-001 1'bgs	5,260	HDP3-001 1'bgs	34.2
ARB3-001 2'bgs	1,920	HDP3-001 2'bgs	152
ARB3-001 4'bgs	2,300	HDP3-001 4'bgs	314
ARB3-001 10'bgs	1,980	HDP3-001 10'bgs	499
ARB3-001 15'bgs	1,950	HDP3-001 15'bgs	354
ARB3-001 20'bgs	1,810	HDP3-001 20'bgs	330
ARB4-001 1'bgs	3,160	HDP4-001 1'bgs	85.1
ARB4-001 2'bgs	404	HDP4-001 2'bgs	21.8
ARB4-001 4'bgs	206	HDP4-001 4'bgs	10
ARB4-001 10'bgs	10.7	HDP4-001 10'bgs	9.35
ARB4-001 15'bgs	3.61	HDP4-001 15'bgs	8.99
ARB4-001 20'bgs	4.85	HDP4-001 20'bgs	10.9
ARB5-001 1'bgs	6,620	HDP5-001 1'bgs	18.7
ARB5-001 2'bgs	594	HDP5-001 2'bgs	12.9
ARB5-001 4'bgs	14.7	HDP5-001 4'bgs	12.6
ARB5-001 10'bgs	6.37	HDP5-001 10'bgs	12
ARB5-001 15'bgs	6.89	HDP5-001 15'bgs	11.2
ARB5-001 20'bgs	4.61	HDP5-001 20'bgs	9.35
ARB6-001 1'bgs	2,720	HDP6-001 1'bgs	43.3
ARB16001 2'bgs	423	HDP6-001 2'bgs	23.5
ARB6-001 4'bgs	165	HDP6-001 4'bgs	18.5
ARB6-001 10'bgs	2.23	HDP6-001 10'bgs	14
ARB6-001 15'bgs	2.09	HDP6-001 15'bgs	13.3
ARB6-001 20'bgs	7	HDP6-001 20'bgs	13.3
ARB7-001 1'bgs	2,770	HDP7-001 1'bgs	21.7
ARB7-001 2'bgs	390	HDP7-001 2'bgs	23.3
ARB7-001 4'bgs	229	HDP7-001 4'bgs	12.5
ARB7-001 10'bgs	3.68	HDP7-001 10'bgs	12.2
ARB7-001 15'bgs	22.4	HDP7-001 15'bgs	14.6
ARB7-001 20'bgs	4.4	HDP7-001 20'bgs	25.5
Note: Samples collected on May 27, 2020. Earlier sampling confirmed that TPH and BTEX were not constituents of concern at the subject site as would be anticipated given the release source (i.e., produced water). The impacts observed appeared to be unrelated to this release and the affected soil was removed for disposal at an approved location.		HDP8-001 1'bgs	99.8
		HDP8-001 2'bgs	86.1
		HDP8-001 4'bgs	222
		HDP8-001 10'bgs	1,430
		HDP8-001 15'bgs	689
		HDP8-001 20'bgs	80.2

Work Plan Proposal

Given the consistently low concentrations of chlorides present at depth within the release footprint, the successful horizontal delineation of the release site, and the rocky layer preventing removal of the uppermost remaining portion of the site, Sport Environmental respectfully requests that NMOCD grant approval to proceed with adding fresh soil to fill the six-to-nine inch area within the release footprint to ensure that erosion and ponding potential are minimized. Sport Environmental also requests that if NMOCD has any seeding/vegetation regrowth requirements that they be made known so that they may be fulfilled. Please note that vegetation present at the subject site was sparse prior to the release.

Geo-tagged Site Photographs

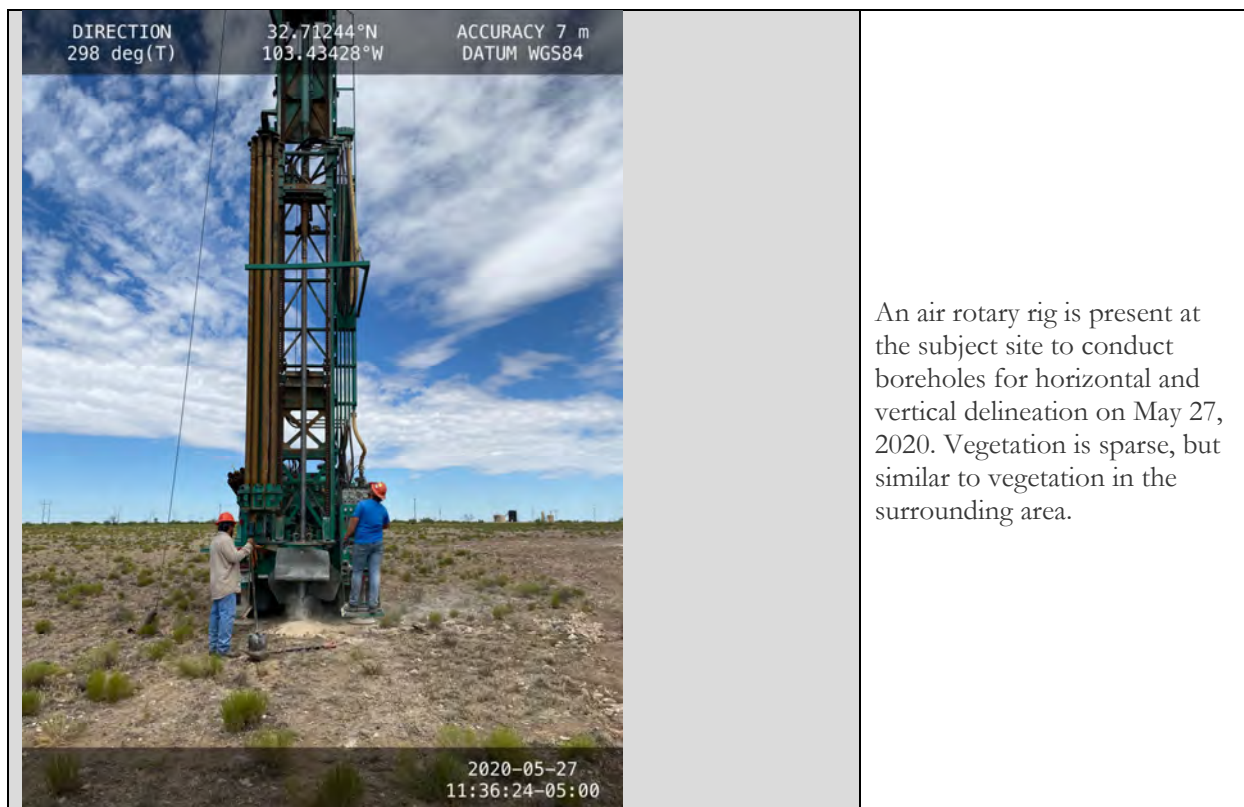
Photographs documenting the condition of the subject site at various points during the cleanup process are included in the photographic log that follows. Whenever possible, geotagged photographs contain the geographic coordinates, date, time, and other data associated with their capture.

Photographic Log

Photograph	Description
	The subject site and a neighboring battery are pictured in an aerial image captured by a drone operated by Sport Environmental on March 25, 2020.
	An aerial view of the release site also captured via drone on March 25, 2020.

	Photographs of the site on May 7, 2020. These images depict the subject site prior to the excavation of six to nine inches of soil. This would be as much soil as could be reasonably removed without risking damage to the protective bedrock layer. This photograph shows the size of rocks present once excavation near the SP15 location had been performed.
	This photograph shows the size of rocks present once excavation near the SP23 location had been performed.

	Smaller rocks are piled at the subject site on May 7, 2020 as excavation of soil from the release footprint takes place.
DIRECTION 32.71291°N 26 deg(T) 103.43502°W ACCURACY 5 m DATUM WGS84  2020-05-27 09:16:46-05:00	An air rotary rig is present at the subject site to conduct boreholes for horizontal and vertical delineation on May 27, 2020.



Request for Work Plan Approval

A review of the analytical results associated with site characterization efforts was performed. The results indicate that a small volume of soil, primarily at the surface of the excavation where rocks and bedrock made removal infeasible contained chloride concentrations greater than the 600 mg/kg limit recommended for the top four feet of soil. However, this rocky layer prevented the downward migration of chlorides and made it possible for the client to effectively remove the sandy soil from within the release footprint and minimize potential release impacts. The client proactively removed and disposed of this soil at an approved and a review of surface water and groundwater data indicates that this release, if approved for closure would not be likely to cause a human health or environmental impact. No further excavation is currently planned for the subject site. The backfilling, seeding, and submission of a final report would be completed within 90 days following NMOCD's approval of the proposed plan. Sport Environmental respectfully requests approval of this work plan on behalf of Tomahawk Construction Resources, LLC and Sundown Energy, LP.

Thank you for considering this proposal. If NMOCD have any further questions or comments regarding this request for the work, please contact us at (432) 683-1100.

Sincerely,

Cianna J Logie

Cianna J. Logie, MS, REP, CESCO, RSO
Environmental & Regulatory Project Manager
Sport Environmental Services, LLC

List of Attachments:

- A Site Characterization C-141*
- B 0.5-Mile Radius Map Denoting Absence of Major Watercourses*
- C NMOSE Water Right Summary*
- D Release Site Plan Denoting Sample Locations (March 25, 2020)*
- E Laboratory Analytical Reports (March 25, 2020)*
- F Boring Log*
- G Laboratory Analytical Reports (May 27, 2020)*
- H Release Site Plan Denoting Sample Locations (May 27, 2020)*

Attachment A

Site Characterization C-141

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Sundown Energy, LP	OGRID 232611
Contact Name Mr. Ralph Butler	Contact Telephone (214) 368-6100 x2102
Contact email rbutler@elandenergy.com	Incident # (assigned by OCD)
Contact mailing address 16400 Dallas Parkway, Suite 100, Dallas, TX 75248	

Location of Release Source

Latitude 32.71451 Longitude -103.43543
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Catena Lease, South Vacuum Unit 27 #003	Site Type Well Pad
Date Release Discovered 2/27/2020	API# (if applicable) 30-025-36891

Unit Letter	Section	Township	Range	County
I	27	18S	35E	Lea

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 20	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No The water's estimated chloride concentration is approximately 14,000 -16,000 mg/L.
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Due to low temperatures, a 3-inch poly-line used to transfer water froze. The line burst at a fused joint when it froze.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

☒ 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: The ground surface at the subject site is flat and the produced water that was released soaked into the ground too quickly to be recovered. No crude oil is believed to be present in the released fluids. No free liquids were present once the release had been stopped. No impact to human health or the environment is anticipated based on the volume and characteristics of this release.	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>RALPH BUTLER PE</u>	Title: <u>Area Prod. Mgr.</u>
Signature: <u>[Signature]</u>	Date: <u>7/13/2020</u>
email: <u>R.BUTLER@SONDOWNENERGY.COM</u>	Telephone: <u>214-368-6100</u> <u>EXT 2102</u>
<u>OCD Only</u> Received by: _____ Date: _____	

Incident ID	nRM2006956155
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	57 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ 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 ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

Characterization Report Checklist: <i>Each of the following items must be included in the report.</i> ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. ☒ Field data ☒ Data table of soil contaminant concentration data ☒ Depth to water determination ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release ☒ Boring or excavation logs ☒ Photographs including date and GIS information ☒ Topographic/Aerial maps ☒ Laboratory data including chain of custody

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

Incident ID	nRM2006956155
District RP	
Facility ID	
Application ID	

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

Printed Name: TRAVIS BUTLER PE Title: Area Prod. Mgr.

Signature: [Signature] Date: 7/13/2020

email: TRBUTLER@SUNDOWN Telephone: _____
ENERGY, LINA.

OCD Only

Received by: Cristina Eads Date: 09/25/2020

Incident ID	nRM2006956155
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: Each of the following items must be included in the plan.

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: TRALPIA BUTLER, PE Title: Area Prod. Mgr.
 Signature: [Signature] Date: 12/13/2020
 email: TRBUTLER@ELANDENERGY.COM Telephone: 214 368 6100 EXT 2102

OCD Only

Received by: [Signature] Date: 12/22/2020

☒ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: [Signature] Date: 12/22/2020

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate OCD 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: RALPH BUTLER JR Title: AREA PROD MGR
 Signature: [Signature] Date: 7/13/2020
 email: RBUTLER@SUNDOWNENERGY.COM Telephone: 214-368 6100
EXT 2102

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Attachment B

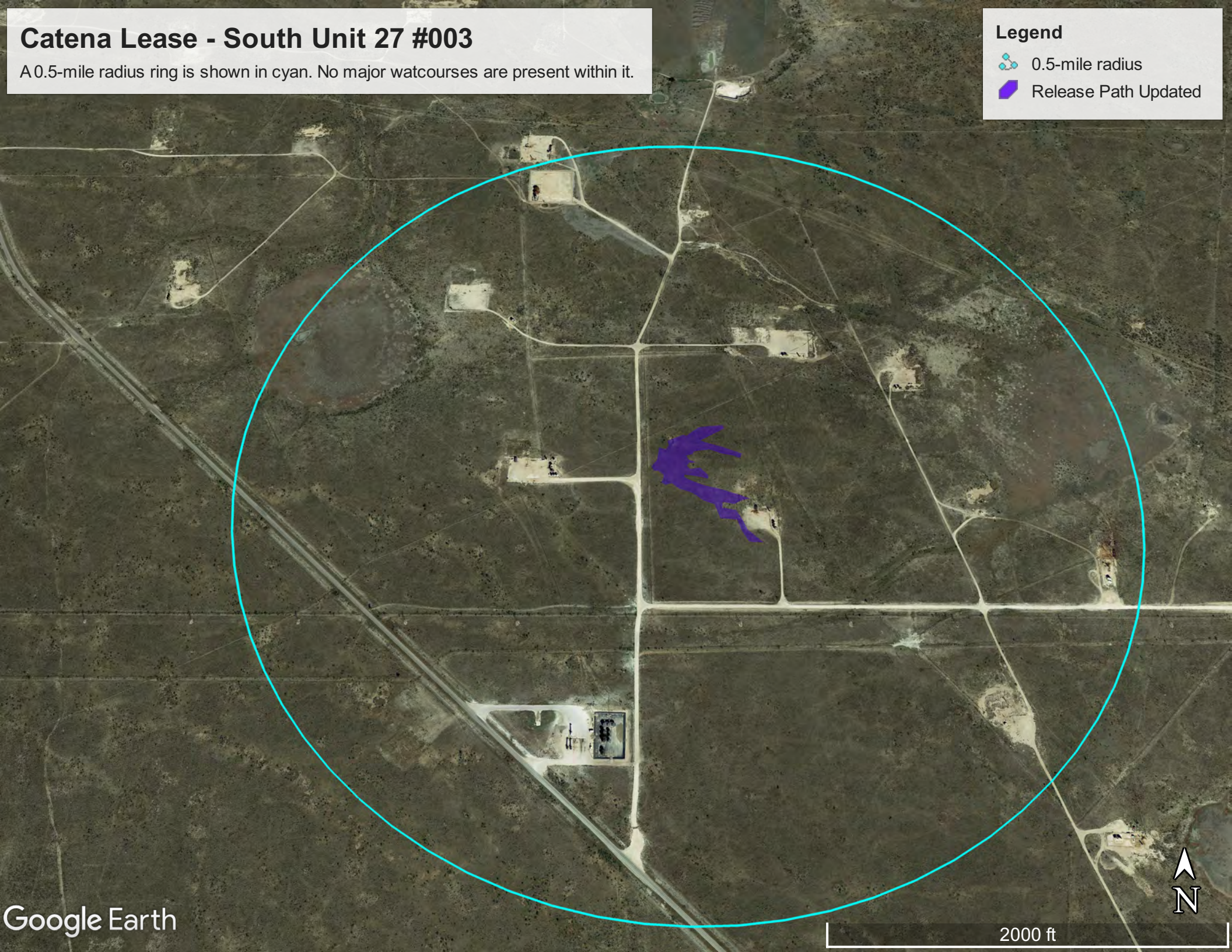
0.5-Mile Radius Map Demonstrating Absence of Major Watercourses

Catena Lease - South Unit 27 #003

A 0.5-mile radius ring is shown in cyan. No major watcourses are present within it.

Legend

-  0.5-mile radius
-  Release Path Updated



Attachment C

NMOSE Water Right Summary



New Mexico Office of the State Engineer

Water Right Summary

[get image list](#)

WR File Number: L 06868 **Subbasin:** L **Cross Reference:** -
Primary Purpose: PRO 72-12-1 PROSPECTING OR DEVELOPMENT OF NATURAL RESOURCE
Primary Status: PMT PERMIT
Total Acres: **Subfile:** - **Header:** -
Total Diversion: 0 **Cause/Case:** -
Owner: NOBLE DRILLING CORP
Contact: BETTY STRAUSER

Documents on File

				Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
	Trn #	Doc	File/Act	1	2		To			
 get images	511353	72121	1971-10-29	PMT	LOG	L 06868 (T EXPIRED)	T		3	

Current Points of Diversion

(NAD83 UTM in meters)											
POD Number	Well Tag	Source	Q						X	Y	Other Location Desc
			64	Q16	Q4	Sec	Tws	Rng			
L 06868		Shallow	1	4	3	26	18S	35E	647026	3620666*	

An () after northing value indicates UTM location was derived from PLSS - see Help

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

7/1/20 10:47 AM

WATER RIGHT SUMMARY



New Mexico Office of the State Engineer

Water Right Summary

[get image list](#)

WR File Number: L 06869 **Subbasin:** L **Cross Reference:** -
Primary Purpose: PRO 72-12-1 PROSPECTING OR DEVELOPMENT OF NATURAL RESOURCE
Primary Status: PMT PERMIT
Total Acres: **Subfile:** - **Header:** -
Total Diversion: 0 **Cause/Case:** -
Owner: NOBLE DRILLING CORP
Contact: JOHN W SHEARMAN

x

Documents on File

				Status			From/	Acres	Diversion	Consumptive
	Trn #	Doc	File/Act	1	2	Transaction Desc.	To			
 get images	511355	72121	1971-11-05	PMT	LOG	L 06869 (T EXPIRED)	T		3	

x

Current Points of Diversion

						(NAD83 UTM in meters)			Other Location Desc
POD Number	Well Tag	Source	Q				X	Y	
L 06869		Shallow	64	Q16	Q4	Sec Tw	18S 35E	646717 3620966*	

An () after northing value indicates UTM location was derived from PLSS - see Help

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

7/1/20 10:48 AM

WATER RIGHT SUMMARY



New Mexico Office of the State Engineer

Water Right Summary

[get image list](#)**WR File Number:** L 13210**Subbasin:** L**Cross Reference:** -**Primary Purpose:** CPS CATHODIC PROTECTION WELL**Primary Status:** PMT PERMIT**Total Acres:****Subfile:** -**Header:** -**Total Diversion:** 0**Cause/Case:** -**Agent:** LESTER HIGGINS**Owner:** CHARLIE E NEWTON

x

Documents on File

[get images](#)

Trn #	Doc	File/Act	Status		Transaction Desc.	From/		Acres	Diversion	Consumptive
			1	2		To				
516902	EXPL	2012-11-16	PMT	APR	L 13210 CATHODIC	T		0	0	

x

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q	64Q	16Q	4Sec	Tws	Rng	X	Y	Other Location Desc
L 13210 POD1			1	3	2	35	18S	35E	647517	3619783	SOUTH VAC 35-1
L 13210 POD2			1	3	2	35	18S	35E	647517	3619783	SOUTH VAC 35-2 NE-SE UNIT #1
L 13210 POD3			3	2	3	26	18S	35E	647043	3620853	REEVES 26-4

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.

7/1/20 10:48 AM

WATER RIGHT SUMMARY

Attachment D

Release Site Plan Denoting Sample Locations (March 25, 2020)

Sundown Energy, LP - Catena Lease, S. Vac. Unit 27 #003

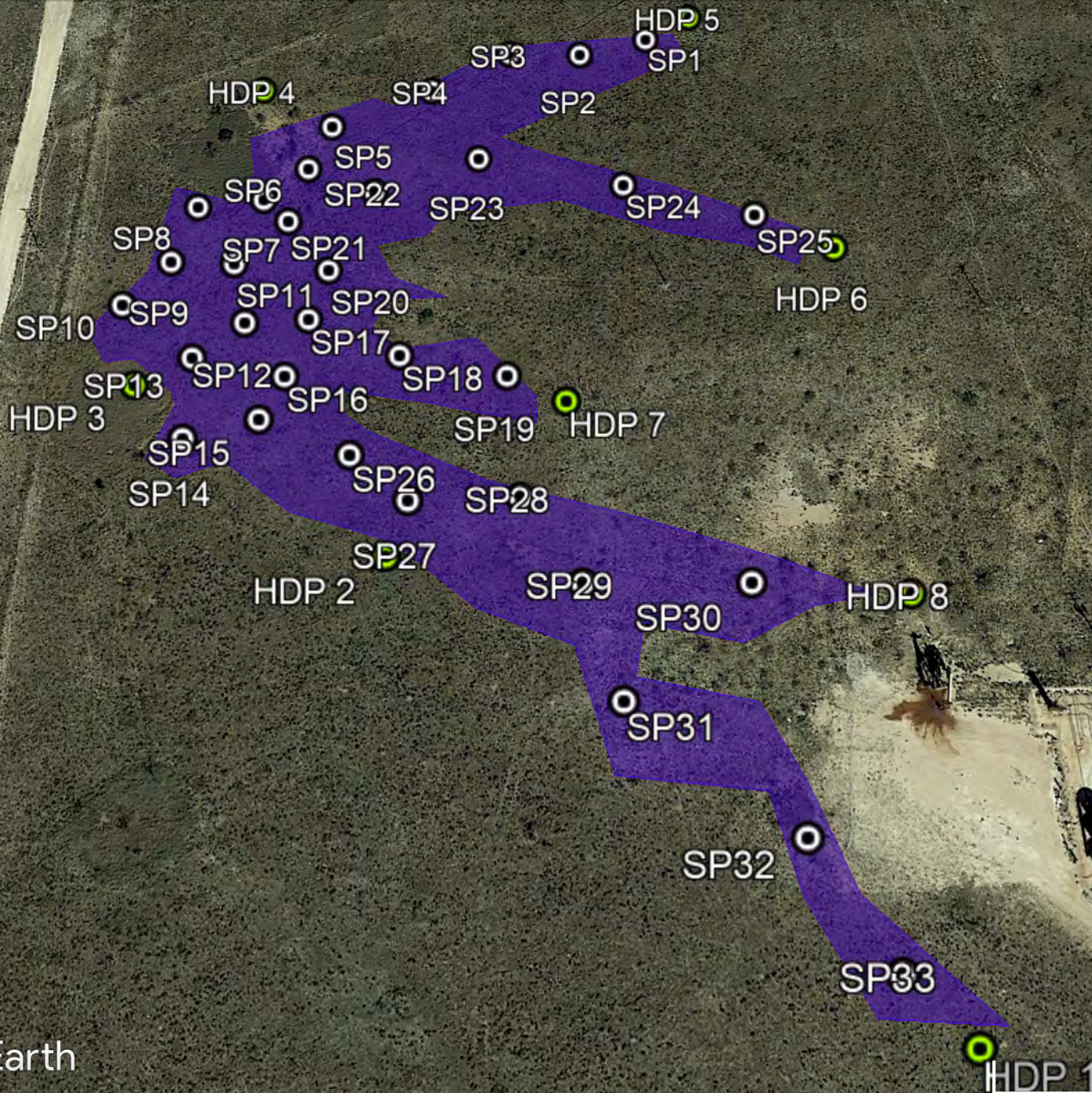
Location: 32.714682°, -103.435108°

Imagery: Google Earth (July 2017)

Path associated with produced water release in February 2020

Legend

-  Horizontal Delineation Point
-  Release Area (3.18 acres)
-  Sample Point



Attachment E

Laboratory Analytical Reports (March 25, 2020)



Certificate of Analysis Summary 656945

Sport Environmental Services, LLC, Midland, TX

Project Name: Sundown Energy, LP

Project Id: 8015

Contact: Debi Moore

Project Location: Catena Lease, S Vac Unit 27 #003 Release

Date Received in Lab: Thu 03.26.2020 10:25

Report Date: 04.02.2020 15:55

Project Manager: John Builes

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	656945-001 SP1-S001 @ Surface SOIL 03.25.2020 09:30	656945-002 SP2-S001 @ Surface SOIL 03.25.2020 09:32	656945-003 SP3-S001 @ Surface SOIL 03.25.2020 09:34	656945-004 SP4-S001 @ Surface SOIL 03.25.2020 09:36	656945-005 SP5-S001 @ Surface SOIL 03.25.2020 09:38	656945-006 SP6-S001 @ Surface SOIL 03.25.2020 09:40
BTEX by SW 8260C SUB: T104704215-19-30	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	03.30.2020 12:00 03.30.2020 13:24 mg/kg RL	03.30.2020 12:00 03.30.2020 13:43 mg/kg RL	03.30.2020 12:00 03.30.2020 14:59 mg/kg RL	03.30.2020 12:00 03.30.2020 15:17 mg/kg RL	03.30.2020 12:00 03.30.2020 15:36 mg/kg RL	03.30.2020 12:00 03.30.2020 15:54 mg/kg RL
Benzene		<0.000206 0.000996	<0.000206 0.000996	<0.000207 0.00100	<0.000206 0.000996	<0.000206 0.000994	<0.000208 0.00101
Toluene		<0.000996 0.00498	0.00105 J 0.00498	<0.00100 0.00501	<0.000996 0.00498	<0.000994 0.00497	0.00139 J 0.00503
Ethylbenzene		<0.000334 0.000996	<0.000334 0.000996	<0.000336 0.00100	<0.000334 0.000996	<0.000334 0.000994	0.000483 J 0.00101
m,p-Xylenes		0.000976 J 0.00199	0.00104 J 0.00199	0.000892 J 0.00200	<0.000435 0.00199	0.000517 J 0.00199	0.00134 J 0.00201
o-Xylene		<0.000981 0.000996	<0.000981 0.000996	<0.000987 0.00100	<0.000981 0.000996	<0.000979 0.000994	<0.000991 0.00101
Total Xylenes		0.000976 J 0.000996	0.00104 0.000996	0.000892 J 0.00100	<0.000435 0.000996	0.000517 J 0.000994	0.00134 0.00101
Total BTEX		0.000976 J 0.000996	0.00209 0.000996	0.000892 J 0.00100	<0.000206 0.000996	0.000517 J 0.000994	0.00321 0.00101
Inorganic Anions by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	03.26.2020 14:00 03.26.2020 19:39 mg/kg RL	03.26.2020 14:00 03.26.2020 19:45 mg/kg RL	03.26.2020 14:00 03.26.2020 19:50 mg/kg RL	03.26.2020 14:00 03.26.2020 19:55 mg/kg RL	03.26.2020 14:00 03.26.2020 20:11 mg/kg RL	03.26.2020 14:00 03.26.2020 20:16 mg/kg RL
Chloride		5320 49.8	14300 101	16000 99.4	27700 250	18900 248	29300 250
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	03.29.2020 14:00 03.29.2020 22:36 mg/kg RL	03.29.2020 14:00 03.29.2020 23:38 mg/kg RL	03.29.2020 14:00 03.29.2020 23:59 mg/kg RL	03.29.2020 14:00 03.30.2020 00:19 mg/kg RL	03.29.2020 14:00 03.30.2020 00:40 mg/kg RL	03.29.2020 14:00 03.30.2020 01:01 mg/kg RL
Gasoline Range Hydrocarbons		<15.0 50.0	<15.0 50.0	<15.0 50.0	<15.0 50.0	<15.0 50.0	<74.7 249
Diesel Range Organics		1140 50.0	2300 50.0	1900 50.0	137 50.0	343 50.0	11200 249
Oil Range Hydrocarbons		254 50.0	456 50.0	399 50.0	50.6 50.0	77.6 50.0	2060 249
Total TPH		1390 50.0	2760 50.0	2300 50.0	188 50.0	421 50.0	13300 249

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

John Builes
Project Manager



Certificate of Analysis Summary 656945

Sport Environmental Services, LLC, Midland, TX

Project Name: Sundown Energy, LP

Project Id: 8015

Contact: Debi Moore

Project Location: Catena Lease, S Vac Unit 27 #003 Release

Date Received in Lab: Thu 03.26.2020 10:25

Report Date: 04.02.2020 15:55

Project Manager: John Builes

Analysis Requested	Lab Id:	656945-007	656945-008	656945-009	656945-010	656945-011	656945-012
	Field Id:	SP7-S001 @ Surface	SP8-S001 @ Surface	SP9-S001 @ Surface	SP10-S001 @ Surface	SP11-S001 @ Surface	SP12-S001 @ Surface
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	03.25.2020 09:42	03.25.2020 09:44	03.25.2020 09:46	03.25.2020 09:47	03.25.2020 09:48	03.25.2020 09:49
BTEX by SW 8260C SUB: T104704215-19-30	Extracted:	03.30.2020 12:00	03.30.2020 15:00	03.30.2020 15:00	03.30.2020 15:00	03.30.2020 15:00	03.30.2020 15:00
	Analyzed:	03.30.2020 16:12	03.30.2020 16:30	03.30.2020 16:48	03.30.2020 17:06	03.30.2020 17:24	03.30.2020 17:43
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000206 0.000996	<0.000208 0.00101	<0.000207 0.000998	<0.000205 0.000990	<0.000207 0.00100	<0.000207 0.00100
Toluene		<0.000996 0.00498	<0.00101 0.00503	<0.000998 0.00499	<0.000990 0.00495	<0.00100 0.00500	<0.00100 0.00500
Ethylbenzene		0.000458 J 0.000996	0.000362 J 0.00101	0.000369 J 0.000998	<0.000332 0.000990	<0.000336 0.00100	<0.000336 0.00100
m,p-Xylenes		0.00186 J 0.00199	0.00160 J 0.00201	0.00118 J 0.00200	0.000960 J 0.00198	0.00125 J 0.00200	0.00120 J 0.00200
o-Xylene		<0.000981 0.000996	<0.000991 0.00101	<0.000983 0.000998	<0.000975 0.000990	<0.000985 0.00100	<0.000985 0.00100
Total Xylenes		0.00186 0.000996	0.00160 0.00101	0.00118 0.000998	0.000960 J 0.000990	0.00125 0.00100	0.00120 0.00100
Total BTEX		0.00232 0.000996	0.00196 0.00101	0.00155 0.000998	0.000960 J 0.000990	0.00125 0.00100	0.00120 0.00100
Inorganic Anions by EPA 300	Extracted:	03.26.2020 14:00	03.26.2020 14:00	03.26.2020 14:00	03.26.2020 14:00	03.26.2020 14:00	03.26.2020 14:00
	Analyzed:	03.26.2020 20:21	03.26.2020 20:27	03.26.2020 20:32	03.26.2020 20:53	03.26.2020 20:58	03.26.2020 21:14
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		25800 253	19100 251	24700 251	18900 253	17000 252	26800 252
TPH by SW8015 Mod	Extracted:	03.29.2020 14:00	03.29.2020 14:00	03.29.2020 14:00	03.29.2020 14:00	03.29.2020 14:00	03.29.2020 14:00
	Analyzed:	03.30.2020 01:22	03.30.2020 01:43	03.30.2020 02:04	03.30.2020 02:25	03.30.2020 03:06	03.30.2020 03:27
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons		<15.0 49.9	<15.0 49.9	<15.0 49.9	<15.0 50.0	<15.0 50.0	<15.0 50.0
Diesel Range Organics		260 49.9	68.7 49.9	54.2 49.9	33.6 J 50.0	39.8 J 50.0	21.8 J 50.0
Oil Range Hydrocarbons		73.7 49.9	21.7 J 49.9	<15.0 49.9	<15.0 50.0	<15.0 50.0	<15.0 50.0
Total TPH		334 49.9	90.4 49.9	54.2 49.9	33.6 J 50.0	39.8 J 50.0	21.8 J 50.0

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

John Builes
Project Manager



Certificate of Analysis Summary 656945

Sport Environmental Services, LLC, Midland, TX

Project Name: Sundown Energy, LP

Project Id: 8015

Contact: Debi Moore

Project Location: Catena Lease, S Vac Unit 27 #003 Release

Date Received in Lab: Thu 03.26.2020 10:25

Report Date: 04.02.2020 15:55

Project Manager: John Builes

Analysis Requested	Lab Id:	656945-013	656945-014	656945-015	656945-016	656945-017	656945-018
	Field Id:	SP13-S001 @ Surface	SP14-S001 @ Surface	SP15-S001 @ Surface	SP16-S001 @ Surface	SP17-S001 @ Surface	SP18-S001 @ Surface
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	03.25.2020 09:50	03.25.2020 09:51	03.25.2020 09:52	03.25.2020 09:53	03.25.2020 09:54	03.25.2020 09:55
BTEX by SW 8260C SUB: T104704215-19-30	Extracted:	03.30.2020 15:00	03.30.2020 15:00	03.30.2020 15:00	03.30.2020 17:00	03.30.2020 17:00	03.30.2020 17:00
	Analyzed:	03.30.2020 18:01	03.30.2020 18:19	03.30.2020 18:37	03.31.2020 00:09	03.31.2020 00:27	03.31.2020 00:45
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000209 0.00101	<0.000207 0.00100	<0.000206 0.000996	<0.000205 0.000992	<0.000207 0.000998	<0.000206 0.000994
Toluene		<0.00101 0.00504	<0.00100 0.00501	<0.000996 0.00498	<0.000992 0.00496	<0.000998 0.00499	<0.000994 0.00497
Ethylbenzene		<0.000338 0.00101	<0.000336 0.00100	0.000349 J 0.000996	0.000337 J 0.000992	<0.000335 0.000998	0.000368 J 0.000994
m,p-Xylenes		0.000685 J 0.00202	0.00108 J 0.00200	0.00151 J 0.00199	0.00153 J 0.00198	0.000858 J 0.00200	0.00156 J 0.00199
o-Xylene		<0.000993 0.00101	<0.000987 0.00100	<0.000981 0.000996	<0.000977 0.000992	<0.000983 0.000998	<0.000979 0.000994
Total Xylenes		0.000685 J 0.00101	0.00108 0.00100	0.00151 0.000996	0.00153 0.000992	0.000858 J 0.000998	0.00156 0.000994
Total BTEX		0.000685 J 0.00101	0.00108 0.00100	0.00186 0.000996	0.00187 0.000992	0.000858 J 0.000998	0.00193 0.000994
Inorganic Anions by EPA 300	Extracted:	03.26.2020 14:00	03.26.2020 14:00	03.26.2020 14:00	03.26.2020 14:00	03.26.2020 14:00	03.26.2020 14:00
	Analyzed:	03.26.2020 21:19	03.26.2020 21:25	03.26.2020 21:30	03.26.2020 21:35	03.26.2020 21:40	03.26.2020 21:46
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		24200 250	20400 249	42700 251	33600 251	20600 249	31100 252
TPH by SW8015 Mod	Extracted:	03.29.2020 14:00	03.29.2020 14:00	03.29.2020 14:00	03.29.2020 14:00	03.29.2020 14:00	03.29.2020 14:00
	Analyzed:	03.30.2020 03:48	03.30.2020 04:09	03.30.2020 04:30	03.30.2020 04:51	03.30.2020 05:12	03.30.2020 05:33
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons		<15.0 49.9	<15.0 49.9	<14.9 49.8	<15.0 50.0	<15.0 50.0	<15.0 49.9
Diesel Range Organics		24.1 J 49.9	23.6 J 49.9	19.5 J 49.8	24.9 J 50.0	34.9 J 50.0	21.1 J 49.9
Oil Range Hydrocarbons		<15.0 49.9	<15.0 49.9	<14.9 49.8	<15.0 50.0	<15.0 50.0	<15.0 49.9
Total TPH		24.1 J 49.9	23.6 J 49.9	19.5 J 49.8	24.9 J 50.0	34.9 J 50.0	21.1 J 49.9

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

John Builes
Project Manager



Certificate of Analysis Summary 656945

Sport Environmental Services, LLC, Midland, TX

Project Name: Sundown Energy, LP

Project Id: 8015

Contact: Debi Moore

Project Location: Catena Lease, S Vac Unit 27 #003 Release

Date Received in Lab: Thu 03.26.2020 10:25

Report Date: 04.02.2020 15:55

Project Manager: John Builes

Analysis Requested	Lab Id:	656945-019	656945-020	656945-021	656945-022	656945-023	656945-024
	Field Id:	SP19-S001 @ Surface	SP20-S001 @ Surface	SP21-S001 @ Surface	SP22-S001 @ Surface	SP23-S001 @ Surface	SP24-S001 @ Surface
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	03.25.2020 09:56	03.25.2020 09:57	03.25.2020 09:58	03.25.2020 09:59	03.25.2020 10:00	03.25.2020 10:01
BTEX by SW 8260C SUB: T104704215-19-30	Extracted:	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00
	Analyzed:	03.31.2020 11:43	03.31.2020 12:02	03.31.2020 12:20	03.31.2020 12:38	03.31.2020 12:57	03.31.2020 13:15
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000207 0.00100	<0.000207 0.000998	<0.000206 0.000994	<0.000205 0.000992	<0.000206 0.000994	<0.000206 0.000996
Toluene		<0.00100 0.00501	<0.000998 0.00499	<0.000994 0.00497	<0.000992 0.00496	<0.000994 0.00497	<0.000996 0.00498
Ethylbenzene		0.000411 JX 0.00100	<0.000335 0.000998	<0.000334 0.000994	<0.000333 0.000992	<0.000334 0.000994	<0.000334 0.000996
m,p-Xylenes		0.00170 JX 0.00200	0.000729 J 0.00200	0.000875 J 0.00199	0.00102 J 0.00198	0.00107 J 0.00199	0.000747 J 0.00199
o-Xylene		<0.000987 0.00100	<0.000983 0.000998	<0.000979 0.000994	<0.000977 0.000992	<0.000979 0.000994	<0.000981 0.000996
Total Xylenes		0.00170 0.00100	0.000729 J 0.000998	0.000875 J 0.000994	0.00102 0.000992	0.00107 0.000994	0.000747 J 0.000996
Total BTEX		0.00211 0.00100	0.000729 J 0.000998	0.000875 J 0.000994	0.00102 0.000992	0.00107 0.000994	0.000747 J 0.000996
Inorganic Anions by EPA 300	Extracted:	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00
	Analyzed:	03.26.2020 22:05	03.26.2020 22:11	03.26.2020 22:17	03.26.2020 22:23	03.26.2020 22:41	03.26.2020 22:47
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		27000 252	17600 252	32300 249	19800 250	31900 249	26000 252
TPH by SW8015 Mod	Extracted:	03.29.2020 14:00	03.29.2020 14:00	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00
	Analyzed:	03.30.2020 05:53	03.30.2020 06:14	** ** *	03.29.2020 13:44	03.29.2020 14:05	03.29.2020 14:26
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons		<15.0 49.9	<14.9 49.8	<15.0 50.0	<15.0 50.0	<15.0 50.0	<14.9 49.8
Diesel Range Organics		24.1 J 49.9	36.3 J 49.8	33.7 J 50.0	27.2 J 50.0	27.0 J 50.0	16.9 J 49.8
Oil Range Hydrocarbons		<15.0 49.9	<14.9 49.8	<15.0 50.0	<15.0 50.0	<15.0 50.0	<14.9 49.8
Total TPH		24.1 J 49.9	36.3 J 49.8	33.7 J 50.0	27.2 J 50.0	27.0 J 50.0	16.9 J 49.8

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

John Builes
Project Manager



Certificate of Analysis Summary 656945

Sport Environmental Services, LLC, Midland, TX

Project Name: Sundown Energy, LP

Project Id: 8015

Contact: Debi Moore

Project Location: Catena Lease, S Vac Unit 27 #003 Release

Date Received in Lab: Thu 03.26.2020 10:25

Report Date: 04.02.2020 15:55

Project Manager: John Builes

Analysis Requested	Lab Id:	656945-025	656945-026	656945-027	656945-028	656945-029	656945-030
	Field Id:	SP25-S001 @ Surface	SP26-S001 @ Surface	SP27-S001 @ Surface	SP28-S001 @ Surface	SP29-S001 @ Surface	SP30-S001 @ Surface
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	03.25.2020 10:02	03.25.2020 10:03	03.25.2020 10:05	03.25.2020 10:06	03.25.2020 10:08	03.25.2020 10:09
BTEX by SW 8260C SUB: T104704215-19-30	Extracted:	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00
	Analyzed:	03.31.2020 13:34	03.31.2020 13:52	03.31.2020 14:11	03.31.2020 14:29	03.31.2020 14:48	03.31.2020 15:06
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000205 0.000992	<0.000207 0.000998	<0.000207 0.00100	<0.000205 0.000992	<0.000205 0.000990	<0.000205 0.000992
Toluene		<0.000992 0.00496	<0.000998 0.00499	<0.00100 0.00501	<0.000992 0.00496	<0.000990 0.00495	<0.000992 0.00496
Ethylbenzene		<0.000333 0.000992	<0.000335 0.000998	<0.000336 0.00100	<0.000333 0.000992	<0.000332 0.000990	<0.000333 0.000992
m,p-Xylenes		0.00103 J 0.00198	0.00126 J 0.00200	0.000842 J 0.00200	0.000952 J 0.00198	0.00130 J 0.00198	<0.000433 0.00198
o-Xylene		<0.000977 0.000992	<0.000983 0.000998	<0.000987 0.00100	<0.000977 0.000992	<0.000975 0.000990	<0.000977 0.000992
Total Xylenes		0.00103 0.000992	0.00126 0.000998	0.000842 J 0.00100	0.000952 J 0.000992	0.00130 0.000990	<0.000433 0.000992
Total BTEX		0.00103 0.000992	0.00126 0.000998	0.000842 J 0.00100	0.000952 J 0.000992	0.00130 0.000990	<0.000205 0.000992
Inorganic Anions by EPA 300	Extracted:	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00
	Analyzed:	03.26.2020 22:53	03.26.2020 22:59	03.26.2020 23:29	03.26.2020 23:05	03.26.2020 23:35	03.26.2020 23:54
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		19300 251	23600 250	23100 250	19600 251	31200 251	23200 252
TPH by SW8015 Mod	Extracted:	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00
	Analyzed:	03.29.2020 15:17	03.29.2020 15:38	03.29.2020 15:59	03.29.2020 16:20	03.29.2020 16:41	03.29.2020 17:02
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons		<15.0 50.0	<15.0 49.9	<15.0 49.9	<15.0 50.0	<15.0 50.0	<15.0 49.9
Diesel Range Organics		28.5 J 50.0	<15.0 49.9	<15.0 49.9	<15.0 50.0	19.4 J 50.0	<15.0 49.9
Oil Range Hydrocarbons		<15.0 50.0	<15.0 49.9	<15.0 49.9	<15.0 50.0	<15.0 50.0	<15.0 49.9
Total TPH		28.5 J 50.0	<15.0 49.9	<15.0 49.9	<15.0 50.0	19.4 J 50.0	<15.0 49.9

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John Builes
Project Manager



Certificate of Analysis Summary 656945

Sport Environmental Services, LLC, Midland, TX

Project Name: Sundown Energy, LP

Project Id: 8015

Contact: Debi Moore

Project Location: Catena Lease, S Vac Unit 27 #003 Release

Date Received in Lab: Thu 03.26.2020 10:25

Report Date: 04.02.2020 15:55

Project Manager: John Builes

Analysis Requested	Lab Id:	656945-031	656945-032	656945-033	656945-034	656945-035	656945-036
	Field Id:	SP31-S001 @ Surface	SP32-S001 @ Surface	SP33-S001 @ Surface	HDP1-S001 @ Surface	HDP2-S001 @ Surface	HDP2-S001 @ Surface
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	03.25.2020 10:10	03.25.2020 10:11	03.25.2020 10:13	03.25.2020 10:20	03.25.2020 10:22	03.25.2020 10:25
BTEX by SW 8260C SUB: T104704215-19-30	Extracted:	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00
	Analyzed:	03.31.2020 15:24	03.31.2020 15:43	03.31.2020 16:01	03.31.2020 16:20	03.31.2020 16:38	03.31.2020 16:56
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000206 0.000996	<0.000207 0.00100	<0.000207 0.000998	<0.000208 0.00100	<0.000207 0.000998	<0.000206 0.000994
Toluene		<0.000996 0.00498	<0.00100 0.00501	<0.000998 0.00499	<0.00100 0.00502	<0.000998 0.00499	<0.000994 0.00497
Ethylbenzene		<0.000334 0.000996	<0.000336 0.00100	<0.000335 0.000998	<0.000337 0.00100	<0.000335 0.000998	<0.000334 0.000994
m,p-Xylenes		<0.000435 0.00199	0.000601 J 0.00200	0.000918 J 0.00200	<0.000438 0.00201	<0.000436 0.00200	0.000447 J 0.00199
o-Xylene		<0.000981 0.000996	<0.000987 0.00100	<0.000983 0.000998	<0.000989 0.00100	<0.000983 0.000998	<0.000979 0.000994
Total Xylenes		<0.000435 0.000996	0.000601 J 0.00100	0.000918 J 0.000998	<0.000438 0.00100	<0.000436 0.000998	0.000447 J 0.000994
Total BTEX		<0.000206 0.000996	0.000601 J 0.00100	0.000918 J 0.000998	<0.000208 0.00100	<0.000207 0.000998	0.000447 J 0.000994
Inorganic Anions by EPA 300	Extracted:	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:00
	Analyzed:	03.27.2020 15:52	03.27.2020 00:06	03.27.2020 00:12	03.26.2020 21:47	03.26.2020 23:11	03.27.2020 00:18
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		21600 253	18800 250	21800 250	406 X 4.98	7.32 5.04	3.00 J 5.00
TPH by SW8015 Mod	Extracted:	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00
	Analyzed:	03.29.2020 17:44	03.29.2020 18:05	03.29.2020 18:25	03.29.2020 18:46	03.29.2020 19:07	03.29.2020 19:28
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons		<14.9 49.8	<15.0 50.0	<15.0 50.0	<15.0 49.9	<14.9 49.8	<15.0 50.0
Diesel Range Organics		<14.9 49.8	20.0 J 50.0	<15.0 50.0	<15.0 49.9	<14.9 49.8	<15.0 50.0
Oil Range Hydrocarbons		<14.9 49.8	<15.0 50.0	<15.0 50.0	<15.0 49.9	<14.9 49.8	<15.0 50.0
Total TPH		<14.9 49.8	20.0 J 50.0	<15.0 50.0	<15.0 49.9	<14.9 49.8	<15.0 50.0

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John Builes
Project Manager



Certificate of Analysis Summary 656945

Sport Environmental Services, LLC, Midland, TX

Project Name: Sundown Energy, LP

Project Id: 8015

Contact: Debi Moore

Project Location: Catena Lease, S Vac Unit 27 #003 Release

Date Received in Lab: Thu 03.26.2020 10:25

Report Date: 04.02.2020 15:55

Project Manager: John Builes

Analysis Requested	Lab Id:	656945-037	656945-038	656945-039	656945-040	656945-041	
	Field Id:	HDP4-S001 @ Surface	HDP5-S001 @ Surface	HDP6-S001 @ Surface	HDP7-S001 @ Surface	HDP8-S001 @ Surface	
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	03.25.2020 10:27	03.25.2020 10:29	03.25.2020 10:31	03.25.2020 10:34	03.25.2020 10:36	
BTEX by SW 8260C SUB: T104704215-19-30	Extracted:	03.31.2020 11:00	03.31.2020 11:00	04.01.2020 13:30	04.01.2020 13:30	04.01.2020 13:30	
	Analyzed:	03.31.2020 17:14	03.31.2020 17:33	04.01.2020 14:42	04.01.2020 15:06	04.01.2020 15:29	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.000206 0.000994	<0.000206 0.000994	<0.000207 0.000998	<0.000205 0.000990	<0.000206 0.000996	
Toluene		<0.000994 0.00497	<0.000994 0.00497	<0.000998 0.00499	<0.000990 0.00495	<0.000996 0.00498	
Ethylbenzene		<0.000334 0.000994	<0.000334 0.000994	<0.000335 0.000998	<0.000332 0.000990	<0.000334 0.000996	
m,p-Xylenes		<0.000434 0.00199	<0.000434 0.00199	<0.000436 0.00200	<0.000432 0.00198	<0.000435 0.00199	
o-Xylene		<0.000979 0.000994	<0.000979 0.000994	<0.000983 0.000998	<0.000975 0.000990	<0.000981 0.000996	
Total Xylenes		<0.000434 0.000994	<0.000434 0.000994	<0.000436 0.000998	<0.000432 0.000990	<0.000435 0.000996	
Total BTEX		<0.000206 0.000994	<0.000206 0.000994	<0.000207 0.000998	<0.000205 0.000990	<0.000206 0.000996	
Inorganic Anions by EPA 300	Extracted:	03.26.2020 16:00	03.26.2020 16:00	03.26.2020 16:05	03.26.2020 16:05	03.26.2020 16:05	
	Analyzed:	03.27.2020 00:24	03.27.2020 00:30	03.27.2020 18:11	03.27.2020 18:26	03.27.2020 18:32	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		201 4.98	5.06 4.98	32.3 5.00	389 5.04	346 4.98	
TPH by SW8015 Mod	Extracted:	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00	03.29.2020 13:00	03.30.2020 15:00	
	Analyzed:	03.29.2020 19:49	03.29.2020 20:10	03.29.2020 20:30	03.29.2020 20:51	03.31.2020 07:43	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons		<15.0 50.0	<15.0 49.9	<15.0 49.9	<15.0 50.0	<15.0 50.0	
Diesel Range Organics		26.0 J 50.0	<15.0 49.9	<15.0 49.9	18.7 J 50.0	<15.0 50.0	
Oil Range Hydrocarbons		<15.0 50.0	<15.0 49.9	<15.0 49.9	<15.0 50.0	<15.0 50.0	
Total TPH		26.0 J 50.0	<15.0 49.9	<15.0 49.9	18.7 J 50.0	<15.0 50.0	

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John Builes
Project Manager



Analytical Report 656945

for

Sport Environmental Services, LLC

Project Manager: Debi Moore

Sundown Energy, LP

8015

04.02.2020

Collected By: Client



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

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

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

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



04.02.2020

Project Manager: **Debi Moore**
Sport Environmental Services, LLC
502 North Big Spring Street
Midland, TX 79701

Reference: XENCO Report No(s): **656945**
Sundown Energy, LP
Project Address: Catena Lease, S Vac Unit 27 #003 Release

Debi Moore:

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) 656945. 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. 656945 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,

A handwritten signature in black ink, appearing to read 'JB', is written over a light blue rectangular background.

John Builes
Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 656945

Sport Environmental Services, LLC, Midland, TX

Sundown Energy, LP

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP1-S001 @ Surface	S	03.25.2020 09:30		656945-001
SP2-S001 @ Surface	S	03.25.2020 09:32		656945-002
SP3-S001 @ Surface	S	03.25.2020 09:34		656945-003
SP4-S001 @ Surface	S	03.25.2020 09:36		656945-004
SP5-S001 @ Surface	S	03.25.2020 09:38		656945-005
SP6-S001 @ Surface	S	03.25.2020 09:40		656945-006
SP7-S001 @ Surface	S	03.25.2020 09:42		656945-007
SP8-S001 @ Surface	S	03.25.2020 09:44		656945-008
SP9-S001 @ Surface	S	03.25.2020 09:46		656945-009
SP10-S001 @ Surface	S	03.25.2020 09:47		656945-010
SP11-S001 @ Surface	S	03.25.2020 09:48		656945-011
SP12-S001 @ Surface	S	03.25.2020 09:49		656945-012
SP13-S001 @ Surface	S	03.25.2020 09:50		656945-013
SP14-S001 @ Surface	S	03.25.2020 09:51		656945-014
SP15-S001 @ Surface	S	03.25.2020 09:52		656945-015
SP16-S001 @ Surface	S	03.25.2020 09:53		656945-016
SP17-S001 @ Surface	S	03.25.2020 09:54		656945-017
SP18-S001 @ Surface	S	03.25.2020 09:55		656945-018
SP19-S001 @ Surface	S	03.25.2020 09:56		656945-019
SP20-S001 @ Surface	S	03.25.2020 09:57		656945-020
SP21-S001 @ Surface	S	03.25.2020 09:58		656945-021
SP22-S001 @ Surface	S	03.25.2020 09:59		656945-022
SP23-S001 @ Surface	S	03.25.2020 10:00		656945-023
SP24-S001 @ Surface	S	03.25.2020 10:01		656945-024
SP25-S001 @ Surface	S	03.25.2020 10:02		656945-025
SP26-S001 @ Surface	S	03.25.2020 10:03		656945-026
SP27-S001 @ Surface	S	03.25.2020 10:05		656945-027
SP28-S001 @ Surface	S	03.25.2020 10:06		656945-028
SP29-S001 @ Surface	S	03.25.2020 10:08		656945-029
SP30-S001 @ Surface	S	03.25.2020 10:09		656945-030
SP31-S001 @ Surface	S	03.25.2020 10:10		656945-031
SP32-S001 @ Surface	S	03.25.2020 10:11		656945-032
SP33-S001 @ Surface	S	03.25.2020 10:13		656945-033
HDP1-S001 @ Surface	S	03.25.2020 10:20		656945-034
HDP2-S001 @ Surface	S	03.25.2020 10:22		656945-035
HDP2-S001 @ Surface	S	03.25.2020 10:25		656945-036
HDP4-S001 @ Surface	S	03.25.2020 10:27		656945-037
HDP5-S001 @ Surface	S	03.25.2020 10:29		656945-038
HDP6-S001 @ Surface	S	03.25.2020 10:31		656945-039
HDP7-S001 @ Surface	S	03.25.2020 10:34		656945-040
HDP8-S001 @ Surface	S	03.25.2020 10:36		656945-041



CASE NARRATIVE

Client Name: Sport Environmental Services, LLC

Project Name: Sundown Energy, LP

Project ID: 8015
Work Order Number(s): 656945

Report Date: 04.02.2020
Date Received: 03.26.2020

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

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121250 Inorganic Anions by EPA 300

Lab Sample ID 656945-035 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 656945-019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038.

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

Batch: LBA-3121544 BTEX by SW 8260C

Lab Sample ID 656945-019 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 656945-019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038.

The Laboratory Control Sample for Toluene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP1-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-001

Date Collected: 03.25.2020 09:30

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5320	49.8	8.55	mg/kg	03.26.2020 19:39		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 22:36	U	1
Diesel Range Organics	C10C28DRO	1140	50.0	15.0	mg/kg	03.29.2020 22:36		1
Oil Range Hydrocarbons	PHCG2835	254	50.0	15.0	mg/kg	03.29.2020 22:36		1
Total TPH	PHC635	1390	50.0	15.0	mg/kg	03.29.2020 22:36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	03.29.2020 22:36	
o-Terphenyl	84-15-1	103	%	70-135	03.29.2020 22:36	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP1-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-001

Date Collected: 03.25.2020 09:30

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 12:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000996	0.000206	mg/kg	03.30.2020 13:24	U	1
Toluene	108-88-3	<0.000996	0.00498	0.000996	mg/kg	03.30.2020 13:24	U	1
Ethylbenzene	100-41-4	<0.000334	0.000996	0.000334	mg/kg	03.30.2020 13:24	U	1
m,p-Xylenes	179601-23-1	0.000976	0.00199	0.000435	mg/kg	03.30.2020 13:24	J	1
o-Xylene	95-47-6	<0.000981	0.000996	0.000981	mg/kg	03.30.2020 13:24	U	1
Total Xylenes	1330-20-7	0.000976	0.000996	0.000435	mg/kg	03.30.2020 13:24	J	1
Total BTEX		0.000976	0.000996	0.000206	mg/kg	03.30.2020 13:24	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	53-142	03.30.2020 13:24	
1,2-Dichloroethane-D4	17060-07-0	112	%	53-150	03.30.2020 13:24	
Toluene-D8	2037-26-5	105	%	70-130	03.30.2020 13:24	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP2-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-002

Date Collected: 03.25.2020 09:32

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14300	101	17.3	mg/kg	03.26.2020 19:45		20

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 23:38	U	1
Diesel Range Organics	C10C28DRO	2300	50.0	15.0	mg/kg	03.29.2020 23:38		1
Oil Range Hydrocarbons	PHCG2835	456	50.0	15.0	mg/kg	03.29.2020 23:38		1
Total TPH	PHC635	2760	50.0	15.0	mg/kg	03.29.2020 23:38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	03.29.2020 23:38	
o-Terphenyl	84-15-1	104	%	70-135	03.29.2020 23:38	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP2-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-002

Date Collected: 03.25.2020 09:32

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 12:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000996	0.000206	mg/kg	03.30.2020 13:43	U	1
Toluene	108-88-3	0.00105	0.00498	0.000996	mg/kg	03.30.2020 13:43	J	1
Ethylbenzene	100-41-4	<0.000334	0.000996	0.000334	mg/kg	03.30.2020 13:43	U	1
m,p-Xylenes	179601-23-1	0.00104	0.00199	0.000435	mg/kg	03.30.2020 13:43	J	1
o-Xylene	95-47-6	<0.000981	0.000996	0.000981	mg/kg	03.30.2020 13:43	U	1
Total Xylenes	1330-20-7	0.00104	0.000996	0.000435	mg/kg	03.30.2020 13:43		1
Total BTEX		0.00209	0.000996	0.000206	mg/kg	03.30.2020 13:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	53-142	03.30.2020 13:43	
1,2-Dichloroethane-D4	17060-07-0	111	%	53-150	03.30.2020 13:43	
Toluene-D8	2037-26-5	108	%	70-130	03.30.2020 13:43	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP3-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-003

Date Collected: 03.25.2020 09:34

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16000	99.4	17.1	mg/kg	03.26.2020 19:50		20

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 23:59	U	1
Diesel Range Organics	C10C28DRO	1900	50.0	15.0	mg/kg	03.29.2020 23:59		1
Oil Range Hydrocarbons	PHCG2835	399	50.0	15.0	mg/kg	03.29.2020 23:59		1
Total TPH	PHC635	2300	50.0	15.0	mg/kg	03.29.2020 23:59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	03.29.2020 23:59	
o-Terphenyl	84-15-1	112	%	70-135	03.29.2020 23:59	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP3-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-003

Date Collected: 03.25.2020 09:34

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 12:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.00100	0.000207	mg/kg	03.30.2020 14:59	U	1
Toluene	108-88-3	<0.00100	0.00501	0.00100	mg/kg	03.30.2020 14:59	U	1
Ethylbenzene	100-41-4	<0.000336	0.00100	0.000336	mg/kg	03.30.2020 14:59	U	1
m,p-Xylenes	179601-23-1	0.000892	0.00200	0.000438	mg/kg	03.30.2020 14:59	J	1
o-Xylene	95-47-6	<0.000987	0.00100	0.000987	mg/kg	03.30.2020 14:59	U	1
Total Xylenes	1330-20-7	0.000892	0.00100	0.000438	mg/kg	03.30.2020 14:59	J	1
Total BTEX		0.000892	0.00100	0.000207	mg/kg	03.30.2020 14:59	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	53-142	03.30.2020 14:59	
1,2-Dichloroethane-D4	17060-07-0	108	%	53-150	03.30.2020 14:59	
Toluene-D8	2037-26-5	108	%	70-130	03.30.2020 14:59	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP4-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-004

Date Collected: 03.25.2020 09:36

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27700	250	42.9	mg/kg	03.26.2020 19:55		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.30.2020 00:19	U	1
Diesel Range Organics	C10C28DRO	137	50.0	15.0	mg/kg	03.30.2020 00:19		1
Oil Range Hydrocarbons	PHCG2835	50.6	50.0	15.0	mg/kg	03.30.2020 00:19		1
Total TPH	PHC635	188	50.0	15.0	mg/kg	03.30.2020 00:19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.30.2020 00:19	
o-Terphenyl	84-15-1	100	%	70-135	03.30.2020 00:19	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP4-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-004

Date Collected: 03.25.2020 09:36

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 12:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000996	0.000206	mg/kg	03.30.2020 15:17	U	1
Toluene	108-88-3	<0.000996	0.00498	0.000996	mg/kg	03.30.2020 15:17	U	1
Ethylbenzene	100-41-4	<0.000334	0.000996	0.000334	mg/kg	03.30.2020 15:17	U	1
m,p-Xylenes	179601-23-1	<0.000435	0.00199	0.000435	mg/kg	03.30.2020 15:17	U	1
o-Xylene	95-47-6	<0.000981	0.000996	0.000981	mg/kg	03.30.2020 15:17	U	1
Total Xylenes	1330-20-7	<0.000435	0.000996	0.000435	mg/kg	03.30.2020 15:17	U	1
Total BTEX		<0.000206	0.000996	0.000206	mg/kg	03.30.2020 15:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	53-142	03.30.2020 15:17	
1,2-Dichloroethane-D4	17060-07-0	110	%	53-150	03.30.2020 15:17	
Toluene-D8	2037-26-5	100	%	70-130	03.30.2020 15:17	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP5-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-005

Date Collected: 03.25.2020 09:38

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18900	248	42.5	mg/kg	03.26.2020 20:11		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.30.2020 00:40	U	1
Diesel Range Organics	C10C28DRO	343	50.0	15.0	mg/kg	03.30.2020 00:40		1
Oil Range Hydrocarbons	PHCG2835	77.6	50.0	15.0	mg/kg	03.30.2020 00:40		1
Total TPH	PHC635	421	50.0	15.0	mg/kg	03.30.2020 00:40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.30.2020 00:40	
o-Terphenyl	84-15-1	101	%	70-135	03.30.2020 00:40	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP5-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-005

Date Collected: 03.25.2020 09:38

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 12:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000994	0.000206	mg/kg	03.30.2020 15:36	U	1
Toluene	108-88-3	<0.000994	0.00497	0.000994	mg/kg	03.30.2020 15:36	U	1
Ethylbenzene	100-41-4	<0.000334	0.000994	0.000334	mg/kg	03.30.2020 15:36	U	1
m,p-Xylenes	179601-23-1	0.000517	0.00199	0.000434	mg/kg	03.30.2020 15:36	J	1
o-Xylene	95-47-6	<0.000979	0.000994	0.000979	mg/kg	03.30.2020 15:36	U	1
Total Xylenes	1330-20-7	0.000517	0.000994	0.000434	mg/kg	03.30.2020 15:36	J	1
Total BTEX		0.000517	0.000994	0.000206	mg/kg	03.30.2020 15:36	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	53-142	03.30.2020 15:36	
1,2-Dichloroethane-D4	17060-07-0	110	%	53-150	03.30.2020 15:36	
Toluene-D8	2037-26-5	103	%	70-130	03.30.2020 15:36	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP6-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-006

Date Collected: 03.25.2020 09:40

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29300	250	42.8	mg/kg	03.26.2020 20:16		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<74.7	249	74.7	mg/kg	03.30.2020 01:01	U	5
Diesel Range Organics	C10C28DRO	11200	249	74.7	mg/kg	03.30.2020 01:01		5
Oil Range Hydrocarbons	PHCG2835	2060	249	74.7	mg/kg	03.30.2020 01:01		5
Total TPH	PHC635	13300	249	74.7	mg/kg	03.30.2020 01:01		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.30.2020 01:01	
o-Terphenyl	84-15-1	100	%	70-135	03.30.2020 01:01	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP6-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-006

Date Collected: 03.25.2020 09:40

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 12:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000208	0.00101	0.000208	mg/kg	03.30.2020 15:54	U	1
Toluene	108-88-3	0.00139	0.00503	0.00101	mg/kg	03.30.2020 15:54	J	1
Ethylbenzene	100-41-4	0.000483	0.00101	0.000338	mg/kg	03.30.2020 15:54	J	1
m,p-Xylenes	179601-23-1	0.00134	0.00201	0.000439	mg/kg	03.30.2020 15:54	J	1
o-Xylene	95-47-6	<0.000991	0.00101	0.000991	mg/kg	03.30.2020 15:54	U	1
Total Xylenes	1330-20-7	0.00134	0.00101	0.000439	mg/kg	03.30.2020 15:54		1
Total BTEX		0.00321	0.00101	0.000208	mg/kg	03.30.2020 15:54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	53-142	03.30.2020 15:54	
1,2-Dichloroethane-D4	17060-07-0	108	%	53-150	03.30.2020 15:54	
Toluene-D8	2037-26-5	106	%	70-130	03.30.2020 15:54	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP7-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-007

Date Collected: 03.25.2020 09:42

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25800	253	43.4	mg/kg	03.26.2020 20:21		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.30.2020 01:22	U	1
Diesel Range Organics	C10C28DRO	260	49.9	15.0	mg/kg	03.30.2020 01:22		1
Oil Range Hydrocarbons	PHCG2835	73.7	49.9	15.0	mg/kg	03.30.2020 01:22		1
Total TPH	PHC635	334	49.9	15.0	mg/kg	03.30.2020 01:22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.30.2020 01:22	
o-Terphenyl	84-15-1	99	%	70-135	03.30.2020 01:22	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP7-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-007

Date Collected: 03.25.2020 09:42

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 12:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000996	0.000206	mg/kg	03.30.2020 16:12	U	1
Toluene	108-88-3	<0.000996	0.00498	0.000996	mg/kg	03.30.2020 16:12	U	1
Ethylbenzene	100-41-4	0.000458	0.000996	0.000334	mg/kg	03.30.2020 16:12	J	1
m,p-Xylenes	179601-23-1	0.00186	0.00199	0.000435	mg/kg	03.30.2020 16:12	J	1
o-Xylene	95-47-6	<0.000981	0.000996	0.000981	mg/kg	03.30.2020 16:12	U	1
Total Xylenes	1330-20-7	0.00186	0.000996	0.000435	mg/kg	03.30.2020 16:12		1
Total BTEX		0.00232	0.000996	0.000206	mg/kg	03.30.2020 16:12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	53-142	03.30.2020 16:12	
1,2-Dichloroethane-D4	17060-07-0	113	%	53-150	03.30.2020 16:12	
Toluene-D8	2037-26-5	101	%	70-130	03.30.2020 16:12	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP8-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-008

Date Collected: 03.25.2020 09:44

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19100	251	43.1	mg/kg	03.26.2020 20:27		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.30.2020 01:43	U	1
Diesel Range Organics	C10C28DRO	68.7	49.9	15.0	mg/kg	03.30.2020 01:43		1
Oil Range Hydrocarbons	PHCG2835	21.7	49.9	15.0	mg/kg	03.30.2020 01:43	J	1
Total TPH	PHC635	90.4	49.9	15.0	mg/kg	03.30.2020 01:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	03.30.2020 01:43	
o-Terphenyl	84-15-1	101	%	70-135	03.30.2020 01:43	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP8-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-008

Date Collected: 03.25.2020 09:44

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 15:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000208	0.00101	0.000208	mg/kg	03.30.2020 16:30	U	1
Toluene	108-88-3	<0.00101	0.00503	0.00101	mg/kg	03.30.2020 16:30	U	1
Ethylbenzene	100-41-4	0.000362	0.00101	0.000338	mg/kg	03.30.2020 16:30	J	1
m,p-Xylenes	179601-23-1	0.00160	0.00201	0.000439	mg/kg	03.30.2020 16:30	J	1
o-Xylene	95-47-6	<0.000991	0.00101	0.000991	mg/kg	03.30.2020 16:30	U	1
Total Xylenes	1330-20-7	0.00160	0.00101	0.000439	mg/kg	03.30.2020 16:30		1
Total BTEX		0.00196	0.00101	0.000208	mg/kg	03.30.2020 16:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	53-142	03.30.2020 16:30	
1,2-Dichloroethane-D4	17060-07-0	113	%	53-150	03.30.2020 16:30	
Toluene-D8	2037-26-5	105	%	70-130	03.30.2020 16:30	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP9-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-009

Date Collected: 03.25.2020 09:46

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24700	251	43.0	mg/kg	03.26.2020 20:32		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.30.2020 02:04	U	1
Diesel Range Organics	C10C28DRO	54.2	49.9	15.0	mg/kg	03.30.2020 02:04		1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	03.30.2020 02:04	U	1
Total TPH	PHC635	54.2	49.9	15.0	mg/kg	03.30.2020 02:04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	03.30.2020 02:04	
o-Terphenyl	84-15-1	103	%	70-135	03.30.2020 02:04	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP9-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-009

Date Collected: 03.25.2020 09:46

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 15:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.000998	0.000207	mg/kg	03.30.2020 16:48	U	1
Toluene	108-88-3	<0.000998	0.00499	0.000998	mg/kg	03.30.2020 16:48	U	1
Ethylbenzene	100-41-4	0.000369	0.000998	0.000335	mg/kg	03.30.2020 16:48	J	1
m,p-Xylenes	179601-23-1	0.00118	0.00200	0.000436	mg/kg	03.30.2020 16:48	J	1
o-Xylene	95-47-6	<0.000983	0.000998	0.000983	mg/kg	03.30.2020 16:48	U	1
Total Xylenes	1330-20-7	0.00118	0.000998	0.000436	mg/kg	03.30.2020 16:48		1
Total BTEX		0.00155	0.000998	0.000207	mg/kg	03.30.2020 16:48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	53-142	03.30.2020 16:48	
1,2-Dichloroethane-D4	17060-07-0	116	%	53-150	03.30.2020 16:48	
Toluene-D8	2037-26-5	102	%	70-130	03.30.2020 16:48	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP10-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-010

Date Collected: 03.25.2020 09:47

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18900	253	43.4	mg/kg	03.26.2020 20:53		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.30.2020 02:25	U	1
Diesel Range Organics	C10C28DRO	33.6	50.0	15.0	mg/kg	03.30.2020 02:25	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.30.2020 02:25	U	1
Total TPH	PHC635	33.6	50.0	15.0	mg/kg	03.30.2020 02:25	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.30.2020 02:25	
o-Terphenyl	84-15-1	98	%	70-135	03.30.2020 02:25	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP10-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-010

Date Collected: 03.25.2020 09:47

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 15:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000205	0.000990	0.000205	mg/kg	03.30.2020 17:06	U	1
Toluene	108-88-3	<0.000990	0.00495	0.000990	mg/kg	03.30.2020 17:06	U	1
Ethylbenzene	100-41-4	<0.000332	0.000990	0.000332	mg/kg	03.30.2020 17:06	U	1
m,p-Xylenes	179601-23-1	0.000960	0.00198	0.000432	mg/kg	03.30.2020 17:06	J	1
o-Xylene	95-47-6	<0.000975	0.000990	0.000975	mg/kg	03.30.2020 17:06	U	1
Total Xylenes	1330-20-7	0.000960	0.000990	0.000432	mg/kg	03.30.2020 17:06	J	1
Total BTEX		0.000960	0.000990	0.000205	mg/kg	03.30.2020 17:06	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	53-142	03.30.2020 17:06	
1,2-Dichloroethane-D4	17060-07-0	109	%	53-150	03.30.2020 17:06	
Toluene-D8	2037-26-5	104	%	70-130	03.30.2020 17:06	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP11-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-011

Date Collected: 03.25.2020 09:48

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17000	252	43.3	mg/kg	03.26.2020 20:58		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.30.2020 03:06	U	1
Diesel Range Organics	C10C28DRO	39.8	50.0	15.0	mg/kg	03.30.2020 03:06	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.30.2020 03:06	U	1
Total TPH	PHC635	39.8	50.0	15.0	mg/kg	03.30.2020 03:06	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	03.30.2020 03:06	
o-Terphenyl	84-15-1	101	%	70-135	03.30.2020 03:06	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP11-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-011

Date Collected: 03.25.2020 09:48

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 15:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.00100	0.000207	mg/kg	03.30.2020 17:24	U	1
Toluene	108-88-3	<0.00100	0.00500	0.00100	mg/kg	03.30.2020 17:24	U	1
Ethylbenzene	100-41-4	<0.000336	0.00100	0.000336	mg/kg	03.30.2020 17:24	U	1
m,p-Xylenes	179601-23-1	0.00125	0.00200	0.000437	mg/kg	03.30.2020 17:24	J	1
o-Xylene	95-47-6	<0.000985	0.00100	0.000985	mg/kg	03.30.2020 17:24	U	1
Total Xylenes	1330-20-7	0.00125	0.00100	0.000437	mg/kg	03.30.2020 17:24		1
Total BTEX		0.00125	0.00100	0.000207	mg/kg	03.30.2020 17:24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	53-142	03.30.2020 17:24	
1,2-Dichloroethane-D4	17060-07-0	113	%	53-150	03.30.2020 17:24	
Toluene-D8	2037-26-5	105	%	70-130	03.30.2020 17:24	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP12-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-012

Date Collected: 03.25.2020 09:49

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26800	252	43.2	mg/kg	03.26.2020 21:14		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.30.2020 03:27	U	1
Diesel Range Organics	C10C28DRO	21.8	50.0	15.0	mg/kg	03.30.2020 03:27	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.30.2020 03:27	U	1
Total TPH	PHC635	21.8	50.0	15.0	mg/kg	03.30.2020 03:27	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.30.2020 03:27	
o-Terphenyl	84-15-1	99	%	70-135	03.30.2020 03:27	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP12-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-012

Date Collected: 03.25.2020 09:49

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 15:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.00100	0.000207	mg/kg	03.30.2020 17:43	U	1
Toluene	108-88-3	<0.00100	0.00500	0.00100	mg/kg	03.30.2020 17:43	U	1
Ethylbenzene	100-41-4	<0.000336	0.00100	0.000336	mg/kg	03.30.2020 17:43	U	1
m,p-Xylenes	179601-23-1	0.00120	0.00200	0.000437	mg/kg	03.30.2020 17:43	J	1
o-Xylene	95-47-6	<0.000985	0.00100	0.000985	mg/kg	03.30.2020 17:43	U	1
Total Xylenes	1330-20-7	0.00120	0.00100	0.000437	mg/kg	03.30.2020 17:43		1
Total BTEX		0.00120	0.00100	0.000207	mg/kg	03.30.2020 17:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	53-142	03.30.2020 17:43	
1,2-Dichloroethane-D4	17060-07-0	113	%	53-150	03.30.2020 17:43	
Toluene-D8	2037-26-5	104	%	70-130	03.30.2020 17:43	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP13-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-013

Date Collected: 03.25.2020 09:50

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24200	250	42.9	mg/kg	03.26.2020 21:19		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.30.2020 03:48	U	1
Diesel Range Organics	C10C28DRO	24.1	49.9	15.0	mg/kg	03.30.2020 03:48	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	03.30.2020 03:48	U	1
Total TPH	PHC635	24.1	49.9	15.0	mg/kg	03.30.2020 03:48	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	03.30.2020 03:48	
o-Terphenyl	84-15-1	99	%	70-135	03.30.2020 03:48	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP13-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-013

Date Collected: 03.25.2020 09:50

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 15:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000209	0.00101	0.000209	mg/kg	03.30.2020 18:01	U	1
Toluene	108-88-3	<0.00101	0.00504	0.00101	mg/kg	03.30.2020 18:01	U	1
Ethylbenzene	100-41-4	<0.000338	0.00101	0.000338	mg/kg	03.30.2020 18:01	U	1
m,p-Xylenes	179601-23-1	0.000685	0.00202	0.000440	mg/kg	03.30.2020 18:01	J	1
o-Xylene	95-47-6	<0.000993	0.00101	0.000993	mg/kg	03.30.2020 18:01	U	1
Total Xylenes	1330-20-7	0.000685	0.00101	0.000440	mg/kg	03.30.2020 18:01	J	1
Total BTEX		0.000685	0.00101	0.000209	mg/kg	03.30.2020 18:01	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	100	%	53-142	03.30.2020 18:01	
1,2-Dichloroethane-D4	17060-07-0	114	%	53-150	03.30.2020 18:01	
Toluene-D8	2037-26-5	106	%	70-130	03.30.2020 18:01	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP14-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-014

Date Collected: 03.25.2020 09:51

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20400	249	42.7	mg/kg	03.26.2020 21:25		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.30.2020 04:09	U	1
Diesel Range Organics	C10C28DRO	23.6	49.9	15.0	mg/kg	03.30.2020 04:09	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	03.30.2020 04:09	U	1
Total TPH	PHC635	23.6	49.9	15.0	mg/kg	03.30.2020 04:09	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.30.2020 04:09	
o-Terphenyl	84-15-1	102	%	70-135	03.30.2020 04:09	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP14-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-014

Date Collected: 03.25.2020 09:51

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 15:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.00100	0.000207	mg/kg	03.30.2020 18:19	U	1
Toluene	108-88-3	<0.00100	0.00501	0.00100	mg/kg	03.30.2020 18:19	U	1
Ethylbenzene	100-41-4	<0.000336	0.00100	0.000336	mg/kg	03.30.2020 18:19	U	1
m,p-Xylenes	179601-23-1	0.00108	0.00200	0.000438	mg/kg	03.30.2020 18:19	J	1
o-Xylene	95-47-6	<0.000987	0.00100	0.000987	mg/kg	03.30.2020 18:19	U	1
Total Xylenes	1330-20-7	0.00108	0.00100	0.000438	mg/kg	03.30.2020 18:19		1
Total BTEX		0.00108	0.00100	0.000207	mg/kg	03.30.2020 18:19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	53-142	03.30.2020 18:19	
1,2-Dichloroethane-D4	17060-07-0	110	%	53-150	03.30.2020 18:19	
Toluene-D8	2037-26-5	104	%	70-130	03.30.2020 18:19	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP15-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-015

Date Collected: 03.25.2020 09:52

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42700	251	43.1	mg/kg	03.26.2020 21:30		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	49.8	14.9	mg/kg	03.30.2020 04:30	U	1
Diesel Range Organics	C10C28DRO	19.5	49.8	14.9	mg/kg	03.30.2020 04:30	J	1
Oil Range Hydrocarbons	PHCG2835	<14.9	49.8	14.9	mg/kg	03.30.2020 04:30	U	1
Total TPH	PHC635	19.5	49.8	14.9	mg/kg	03.30.2020 04:30	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.30.2020 04:30	
o-Terphenyl	84-15-1	100	%	70-135	03.30.2020 04:30	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP15-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-015

Date Collected: 03.25.2020 09:52

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 15:00

Basis: Wet Weight

Seq Number: 3121345

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000996	0.000206	mg/kg	03.30.2020 18:37	U	1
Toluene	108-88-3	<0.000996	0.00498	0.000996	mg/kg	03.30.2020 18:37	U	1
Ethylbenzene	100-41-4	0.000349	0.000996	0.000334	mg/kg	03.30.2020 18:37	J	1
m,p-Xylenes	179601-23-1	0.00151	0.00199	0.000435	mg/kg	03.30.2020 18:37	J	1
o-Xylene	95-47-6	<0.000981	0.000996	0.000981	mg/kg	03.30.2020 18:37	U	1
Total Xylenes	1330-20-7	0.00151	0.000996	0.000435	mg/kg	03.30.2020 18:37		1
Total BTEX		0.00186	0.000996	0.000206	mg/kg	03.30.2020 18:37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	53-142	03.30.2020 18:37	
1,2-Dichloroethane-D4	17060-07-0	112	%	53-150	03.30.2020 18:37	
Toluene-D8	2037-26-5	103	%	70-130	03.30.2020 18:37	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP16-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-016

Date Collected: 03.25.2020 09:53

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	33600	251	43.1	mg/kg	03.26.2020 21:35		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.30.2020 04:51	U	1
Diesel Range Organics	C10C28DRO	24.9	50.0	15.0	mg/kg	03.30.2020 04:51	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.30.2020 04:51	U	1
Total TPH	PHC635	24.9	50.0	15.0	mg/kg	03.30.2020 04:51	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	03.30.2020 04:51	
o-Terphenyl	84-15-1	99	%	70-135	03.30.2020 04:51	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP16-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-016

Date Collected: 03.25.2020 09:53

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 17:00

Basis: Wet Weight

Seq Number: 3121419

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000205	0.000992	0.000205	mg/kg	03.31.2020 00:09	U	1
Toluene	108-88-3	<0.000992	0.00496	0.000992	mg/kg	03.31.2020 00:09	U	1
Ethylbenzene	100-41-4	0.000337	0.000992	0.000333	mg/kg	03.31.2020 00:09	J	1
m,p-Xylenes	179601-23-1	0.00153	0.00198	0.000433	mg/kg	03.31.2020 00:09	J	1
o-Xylene	95-47-6	<0.000977	0.000992	0.000977	mg/kg	03.31.2020 00:09	U	1
Total Xylenes	1330-20-7	0.00153	0.000992	0.000433	mg/kg	03.31.2020 00:09		1
Total BTEX		0.00187	0.000992	0.000205	mg/kg	03.31.2020 00:09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	53-142	03.31.2020 00:09	
1,2-Dichloroethane-D4	17060-07-0	109	%	53-150	03.31.2020 00:09	
Toluene-D8	2037-26-5	103	%	70-130	03.31.2020 00:09	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP17-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-017

Date Collected: 03.25.2020 09:54

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20600	249	42.7	mg/kg	03.26.2020 21:40		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.30.2020 05:12	U	1
Diesel Range Organics	C10C28DRO	34.9	50.0	15.0	mg/kg	03.30.2020 05:12	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.30.2020 05:12	U	1
Total TPH	PHC635	34.9	50.0	15.0	mg/kg	03.30.2020 05:12	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	03.30.2020 05:12	
o-Terphenyl	84-15-1	101	%	70-135	03.30.2020 05:12	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP17-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-017

Date Collected: 03.25.2020 09:54

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 17:00

Basis: Wet Weight

Seq Number: 3121419

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.000998	0.000207	mg/kg	03.31.2020 00:27	U	1
Toluene	108-88-3	<0.000998	0.00499	0.000998	mg/kg	03.31.2020 00:27	U	1
Ethylbenzene	100-41-4	<0.000335	0.000998	0.000335	mg/kg	03.31.2020 00:27	U	1
m,p-Xylenes	179601-23-1	0.000858	0.00200	0.000436	mg/kg	03.31.2020 00:27	J	1
o-Xylene	95-47-6	<0.000983	0.000998	0.000983	mg/kg	03.31.2020 00:27	U	1
Total Xylenes	1330-20-7	0.000858	0.000998	0.000436	mg/kg	03.31.2020 00:27	J	1
Total BTEX		0.000858	0.000998	0.000207	mg/kg	03.31.2020 00:27	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	53-142	03.31.2020 00:27	
1,2-Dichloroethane-D4	17060-07-0	109	%	53-150	03.31.2020 00:27	
Toluene-D8	2037-26-5	104	%	70-130	03.31.2020 00:27	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP18-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-018

Date Collected: 03.25.2020 09:55

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 14:00

Basis: Wet Weight

Seq Number: 3121102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	31100	252	43.3	mg/kg	03.26.2020 21:46		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.30.2020 05:33	U	1
Diesel Range Organics	C10C28DRO	21.1	49.9	15.0	mg/kg	03.30.2020 05:33	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	03.30.2020 05:33	U	1
Total TPH	PHC635	21.1	49.9	15.0	mg/kg	03.30.2020 05:33	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.30.2020 05:33	
o-Terphenyl	84-15-1	101	%	70-135	03.30.2020 05:33	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP18-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-018

Date Collected: 03.25.2020 09:55

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.30.2020 17:00

Basis: Wet Weight

Seq Number: 3121419

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000994	0.000206	mg/kg	03.31.2020 00:45	U	1
Toluene	108-88-3	<0.000994	0.00497	0.000994	mg/kg	03.31.2020 00:45	U	1
Ethylbenzene	100-41-4	0.000368	0.000994	0.000334	mg/kg	03.31.2020 00:45	J	1
m,p-Xylenes	179601-23-1	0.00156	0.00199	0.000434	mg/kg	03.31.2020 00:45	J	1
o-Xylene	95-47-6	<0.000979	0.000994	0.000979	mg/kg	03.31.2020 00:45	U	1
Total Xylenes	1330-20-7	0.00156	0.000994	0.000434	mg/kg	03.31.2020 00:45		1
Total BTEX		0.00193	0.000994	0.000206	mg/kg	03.31.2020 00:45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	100	%	53-142	03.31.2020 00:45	
1,2-Dichloroethane-D4	17060-07-0	112	%	53-150	03.31.2020 00:45	
Toluene-D8	2037-26-5	103	%	70-130	03.31.2020 00:45	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP19-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-019

Date Collected: 03.25.2020 09:56

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27000	252	43.2	mg/kg	03.26.2020 22:05		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.30.2020 05:53	U	1
Diesel Range Organics	C10C28DRO	24.1	49.9	15.0	mg/kg	03.30.2020 05:53	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	03.30.2020 05:53	U	1
Total TPH	PHC635	24.1	49.9	15.0	mg/kg	03.30.2020 05:53	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	03.30.2020 05:53	
o-Terphenyl	84-15-1	97	%	70-135	03.30.2020 05:53	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP19-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-019

Date Collected: 03.25.2020 09:56

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.00100	0.000207	mg/kg	03.31.2020 11:43	U	1
Toluene	108-88-3	<0.00100	0.00501	0.00100	mg/kg	03.31.2020 11:43	UX	1
Ethylbenzene	100-41-4	0.000411	0.00100	0.000336	mg/kg	03.31.2020 11:43	JX	1
m,p-Xylenes	179601-23-1	0.00170	0.00200	0.000438	mg/kg	03.31.2020 11:43	JX	1
o-Xylene	95-47-6	<0.000987	0.00100	0.000987	mg/kg	03.31.2020 11:43	UX	1
Total Xylenes	1330-20-7	0.00170	0.00100	0.000438	mg/kg	03.31.2020 11:43		1
Total BTEX		0.00211	0.00100	0.000207	mg/kg	03.31.2020 11:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	53-142	03.31.2020 11:43	
1,2-Dichloroethane-D4	17060-07-0	120	%	53-150	03.31.2020 11:43	
Toluene-D8	2037-26-5	103	%	70-130	03.31.2020 11:43	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP20-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-020

Date Collected: 03.25.2020 09:57

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17600	252	43.2	mg/kg	03.26.2020 22:11		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 14:00

Basis: Wet Weight

Seq Number: 3121324

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	49.8	14.9	mg/kg	03.30.2020 06:14	U	1
Diesel Range Organics	C10C28DRO	36.3	49.8	14.9	mg/kg	03.30.2020 06:14	J	1
Oil Range Hydrocarbons	PHCG2835	<14.9	49.8	14.9	mg/kg	03.30.2020 06:14	U	1
Total TPH	PHC635	36.3	49.8	14.9	mg/kg	03.30.2020 06:14	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	03.30.2020 06:14	
o-Terphenyl	84-15-1	99	%	70-135	03.30.2020 06:14	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP20-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-020

Date Collected: 03.25.2020 09:57

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.000998	0.000207	mg/kg	03.31.2020 12:02	U	1
Toluene	108-88-3	<0.000998	0.00499	0.000998	mg/kg	03.31.2020 12:02	U	1
Ethylbenzene	100-41-4	<0.000335	0.000998	0.000335	mg/kg	03.31.2020 12:02	U	1
m,p-Xylenes	179601-23-1	0.000729	0.00200	0.000436	mg/kg	03.31.2020 12:02	J	1
o-Xylene	95-47-6	<0.000983	0.000998	0.000983	mg/kg	03.31.2020 12:02	U	1
Total Xylenes	1330-20-7	0.000729	0.000998	0.000436	mg/kg	03.31.2020 12:02	J	1
Total BTEX		0.000729	0.000998	0.000207	mg/kg	03.31.2020 12:02	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	53-142	03.31.2020 12:02	
1,2-Dichloroethane-D4	17060-07-0	111	%	53-150	03.31.2020 12:02	
Toluene-D8	2037-26-5	101	%	70-130	03.31.2020 12:02	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP21-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-021

Date Collected: 03.25.2020 09:58

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	32300	249	42.7	mg/kg	03.26.2020 22:17		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 12:42	U	1
Diesel Range Organics	C10C28DRO	33.7	50.0	15.0	mg/kg	03.29.2020 12:42	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.29.2020 12:42	U	1
Total TPH	PHC635	33.7	50.0	15.0	mg/kg	03.29.2020 12:42	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	03.29.2020 12:42	
o-Terphenyl	84-15-1	101	%	70-135	03.29.2020 12:42	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP21-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-021

Date Collected: 03.25.2020 09:58

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000994	0.000206	mg/kg	03.31.2020 12:20	U	1
Toluene	108-88-3	<0.000994	0.00497	0.000994	mg/kg	03.31.2020 12:20	U	1
Ethylbenzene	100-41-4	<0.000334	0.000994	0.000334	mg/kg	03.31.2020 12:20	U	1
m,p-Xylenes	179601-23-1	0.000875	0.00199	0.000434	mg/kg	03.31.2020 12:20	J	1
o-Xylene	95-47-6	<0.000979	0.000994	0.000979	mg/kg	03.31.2020 12:20	U	1
Total Xylenes	1330-20-7	0.000875	0.000994	0.000434	mg/kg	03.31.2020 12:20	J	1
Total BTEX		0.000875	0.000994	0.000206	mg/kg	03.31.2020 12:20	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	53-142	03.31.2020 12:20	
1,2-Dichloroethane-D4	17060-07-0	112	%	53-150	03.31.2020 12:20	
Toluene-D8	2037-26-5	105	%	70-130	03.31.2020 12:20	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP22-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-022

Date Collected: 03.25.2020 09:59

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19800	250	42.9	mg/kg	03.26.2020 22:23		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 13:44	U	1
Diesel Range Organics	C10C28DRO	27.2	50.0	15.0	mg/kg	03.29.2020 13:44	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.29.2020 13:44	U	1
Total TPH	PHC635	27.2	50.0	15.0	mg/kg	03.29.2020 13:44	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	03.29.2020 13:44	
o-Terphenyl	84-15-1	102	%	70-135	03.29.2020 13:44	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP22-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-022

Date Collected: 03.25.2020 09:59

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000205	0.000992	0.000205	mg/kg	03.31.2020 12:38	U	1
Toluene	108-88-3	<0.000992	0.00496	0.000992	mg/kg	03.31.2020 12:38	U	1
Ethylbenzene	100-41-4	<0.000333	0.000992	0.000333	mg/kg	03.31.2020 12:38	U	1
m,p-Xylenes	179601-23-1	0.00102	0.00198	0.000433	mg/kg	03.31.2020 12:38	J	1
o-Xylene	95-47-6	<0.000977	0.000992	0.000977	mg/kg	03.31.2020 12:38	U	1
Total Xylenes	1330-20-7	0.00102	0.000992	0.000433	mg/kg	03.31.2020 12:38		1
Total BTEX		0.00102	0.000992	0.000205	mg/kg	03.31.2020 12:38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	53-142	03.31.2020 12:38	
1,2-Dichloroethane-D4	17060-07-0	110	%	53-150	03.31.2020 12:38	
Toluene-D8	2037-26-5	105	%	70-130	03.31.2020 12:38	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP23-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-023

Date Collected: 03.25.2020 10:00

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	31900	249	42.7	mg/kg	03.26.2020 22:41		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 14:05	U	1
Diesel Range Organics	C10C28DRO	27.0	50.0	15.0	mg/kg	03.29.2020 14:05	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.29.2020 14:05	U	1
Total TPH	PHC635	27.0	50.0	15.0	mg/kg	03.29.2020 14:05	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	03.29.2020 14:05	
o-Terphenyl	84-15-1	103	%	70-135	03.29.2020 14:05	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP23-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-023

Date Collected: 03.25.2020 10:00

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000994	0.000206	mg/kg	03.31.2020 12:57	U	1
Toluene	108-88-3	<0.000994	0.00497	0.000994	mg/kg	03.31.2020 12:57	U	1
Ethylbenzene	100-41-4	<0.000334	0.000994	0.000334	mg/kg	03.31.2020 12:57	U	1
m,p-Xylenes	179601-23-1	0.00107	0.00199	0.000434	mg/kg	03.31.2020 12:57	J	1
o-Xylene	95-47-6	<0.000979	0.000994	0.000979	mg/kg	03.31.2020 12:57	U	1
Total Xylenes	1330-20-7	0.00107	0.000994	0.000434	mg/kg	03.31.2020 12:57		1
Total BTEX		0.00107	0.000994	0.000206	mg/kg	03.31.2020 12:57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	53-142	03.31.2020 12:57	
1,2-Dichloroethane-D4	17060-07-0	115	%	53-150	03.31.2020 12:57	
Toluene-D8	2037-26-5	102	%	70-130	03.31.2020 12:57	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP24-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-024

Date Collected: 03.25.2020 10:01

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26000	252	43.3	mg/kg	03.26.2020 22:47		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	49.8	14.9	mg/kg	03.29.2020 14:26	U	1
Diesel Range Organics	C10C28DRO	16.9	49.8	14.9	mg/kg	03.29.2020 14:26	J	1
Oil Range Hydrocarbons	PHCG2835	<14.9	49.8	14.9	mg/kg	03.29.2020 14:26	U	1
Total TPH	PHC635	16.9	49.8	14.9	mg/kg	03.29.2020 14:26	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	03.29.2020 14:26	
o-Terphenyl	84-15-1	100	%	70-135	03.29.2020 14:26	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP24-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-024

Date Collected: 03.25.2020 10:01

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000996	0.000206	mg/kg	03.31.2020 13:15	U	1
Toluene	108-88-3	<0.000996	0.00498	0.000996	mg/kg	03.31.2020 13:15	U	1
Ethylbenzene	100-41-4	<0.000334	0.000996	0.000334	mg/kg	03.31.2020 13:15	U	1
m,p-Xylenes	179601-23-1	0.000747	0.00199	0.000435	mg/kg	03.31.2020 13:15	J	1
o-Xylene	95-47-6	<0.000981	0.000996	0.000981	mg/kg	03.31.2020 13:15	U	1
Total Xylenes	1330-20-7	0.000747	0.000996	0.000435	mg/kg	03.31.2020 13:15	J	1
Total BTEX		0.000747	0.000996	0.000206	mg/kg	03.31.2020 13:15	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	53-142	03.31.2020 13:15	
1,2-Dichloroethane-D4	17060-07-0	112	%	53-150	03.31.2020 13:15	
Toluene-D8	2037-26-5	104	%	70-130	03.31.2020 13:15	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP25-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-025

Date Collected: 03.25.2020 10:02

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19300	251	43.1	mg/kg	03.26.2020 22:53		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 15:17	U	1
Diesel Range Organics	C10C28DRO	28.5	50.0	15.0	mg/kg	03.29.2020 15:17	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.29.2020 15:17	U	1
Total TPH	PHC635	28.5	50.0	15.0	mg/kg	03.29.2020 15:17	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.29.2020 15:17	
o-Terphenyl	84-15-1	100	%	70-135	03.29.2020 15:17	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP25-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-025

Date Collected: 03.25.2020 10:02

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000205	0.000992	0.000205	mg/kg	03.31.2020 13:34	U	1
Toluene	108-88-3	<0.000992	0.00496	0.000992	mg/kg	03.31.2020 13:34	U	1
Ethylbenzene	100-41-4	<0.000333	0.000992	0.000333	mg/kg	03.31.2020 13:34	U	1
m,p-Xylenes	179601-23-1	0.00103	0.00198	0.000433	mg/kg	03.31.2020 13:34	J	1
o-Xylene	95-47-6	<0.000977	0.000992	0.000977	mg/kg	03.31.2020 13:34	U	1
Total Xylenes	1330-20-7	0.00103	0.000992	0.000433	mg/kg	03.31.2020 13:34		1
Total BTEX		0.00103	0.000992	0.000205	mg/kg	03.31.2020 13:34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	53-142	03.31.2020 13:34	
1,2-Dichloroethane-D4	17060-07-0	110	%	53-150	03.31.2020 13:34	
Toluene-D8	2037-26-5	102	%	70-130	03.31.2020 13:34	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP26-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-026

Date Collected: 03.25.2020 10:03

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23600	250	42.8	mg/kg	03.26.2020 22:59		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.29.2020 15:38	U	1
Diesel Range Organics	C10C28DRO	<15.0	49.9	15.0	mg/kg	03.29.2020 15:38	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	03.29.2020 15:38	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	03.29.2020 15:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.29.2020 15:38	
o-Terphenyl	84-15-1	101	%	70-135	03.29.2020 15:38	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP26-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-026

Date Collected: 03.25.2020 10:03

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.000998	0.000207	mg/kg	03.31.2020 13:52	U	1
Toluene	108-88-3	<0.000998	0.00499	0.000998	mg/kg	03.31.2020 13:52	U	1
Ethylbenzene	100-41-4	<0.000335	0.000998	0.000335	mg/kg	03.31.2020 13:52	U	1
m,p-Xylenes	179601-23-1	0.00126	0.00200	0.000436	mg/kg	03.31.2020 13:52	J	1
o-Xylene	95-47-6	<0.000983	0.000998	0.000983	mg/kg	03.31.2020 13:52	U	1
Total Xylenes	1330-20-7	0.00126	0.000998	0.000436	mg/kg	03.31.2020 13:52		1
Total BTEX		0.00126	0.000998	0.000207	mg/kg	03.31.2020 13:52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	53-142	03.31.2020 13:52	
1,2-Dichloroethane-D4	17060-07-0	109	%	53-150	03.31.2020 13:52	
Toluene-D8	2037-26-5	103	%	70-130	03.31.2020 13:52	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP27-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-027

Date Collected: 03.25.2020 10:05

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23100	250	42.9	mg/kg	03.26.2020 23:29		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.29.2020 15:59	U	1
Diesel Range Organics	C10C28DRO	<15.0	49.9	15.0	mg/kg	03.29.2020 15:59	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	03.29.2020 15:59	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	03.29.2020 15:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.29.2020 15:59	
o-Terphenyl	84-15-1	101	%	70-135	03.29.2020 15:59	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP27-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-027

Date Collected: 03.25.2020 10:05

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.00100	0.000207	mg/kg	03.31.2020 14:11	U	1
Toluene	108-88-3	<0.00100	0.00501	0.00100	mg/kg	03.31.2020 14:11	U	1
Ethylbenzene	100-41-4	<0.000336	0.00100	0.000336	mg/kg	03.31.2020 14:11	U	1
m,p-Xylenes	179601-23-1	0.000842	0.00200	0.000438	mg/kg	03.31.2020 14:11	J	1
o-Xylene	95-47-6	<0.000987	0.00100	0.000987	mg/kg	03.31.2020 14:11	U	1
Total Xylenes	1330-20-7	0.000842	0.00100	0.000438	mg/kg	03.31.2020 14:11	J	1
Total BTEX		0.000842	0.00100	0.000207	mg/kg	03.31.2020 14:11	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	53-142	03.31.2020 14:11	
1,2-Dichloroethane-D4	17060-07-0	111	%	53-150	03.31.2020 14:11	
Toluene-D8	2037-26-5	104	%	70-130	03.31.2020 14:11	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP28-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-028

Date Collected: 03.25.2020 10:06

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19600	251	43.0	mg/kg	03.26.2020 23:05		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 16:20	U	1
Diesel Range Organics	C10C28DRO	<15.0	50.0	15.0	mg/kg	03.29.2020 16:20	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.29.2020 16:20	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	03.29.2020 16:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	03.29.2020 16:20	
o-Terphenyl	84-15-1	101	%	70-135	03.29.2020 16:20	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP28-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-028

Date Collected: 03.25.2020 10:06

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000205	0.000992	0.000205	mg/kg	03.31.2020 14:29	U	1
Toluene	108-88-3	<0.000992	0.00496	0.000992	mg/kg	03.31.2020 14:29	U	1
Ethylbenzene	100-41-4	<0.000333	0.000992	0.000333	mg/kg	03.31.2020 14:29	U	1
m,p-Xylenes	179601-23-1	0.000952	0.00198	0.000433	mg/kg	03.31.2020 14:29	J	1
o-Xylene	95-47-6	<0.000977	0.000992	0.000977	mg/kg	03.31.2020 14:29	U	1
Total Xylenes	1330-20-7	0.000952	0.000992	0.000433	mg/kg	03.31.2020 14:29	J	1
Total BTEX		0.000952	0.000992	0.000205	mg/kg	03.31.2020 14:29	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	53-142	03.31.2020 14:29	
1,2-Dichloroethane-D4	17060-07-0	114	%	53-150	03.31.2020 14:29	
Toluene-D8	2037-26-5	105	%	70-130	03.31.2020 14:29	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP29-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-029

Date Collected: 03.25.2020 10:08

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	31200	251	43.0	mg/kg	03.26.2020 23:35		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 16:41	U	1
Diesel Range Organics	C10C28DRO	19.4	50.0	15.0	mg/kg	03.29.2020 16:41	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.29.2020 16:41	U	1
Total TPH	PHC635	19.4	50.0	15.0	mg/kg	03.29.2020 16:41	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	03.29.2020 16:41	
o-Terphenyl	84-15-1	100	%	70-135	03.29.2020 16:41	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP29-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-029

Date Collected: 03.25.2020 10:08

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000205	0.000990	0.000205	mg/kg	03.31.2020 14:48	U	1
Toluene	108-88-3	<0.000990	0.00495	0.000990	mg/kg	03.31.2020 14:48	U	1
Ethylbenzene	100-41-4	<0.000332	0.000990	0.000332	mg/kg	03.31.2020 14:48	U	1
m,p-Xylenes	179601-23-1	0.00130	0.00198	0.000432	mg/kg	03.31.2020 14:48	J	1
o-Xylene	95-47-6	<0.000975	0.000990	0.000975	mg/kg	03.31.2020 14:48	U	1
Total Xylenes	1330-20-7	0.00130	0.000990	0.000432	mg/kg	03.31.2020 14:48		1
Total BTEX		0.00130	0.000990	0.000205	mg/kg	03.31.2020 14:48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	53-142	03.31.2020 14:48	
1,2-Dichloroethane-D4	17060-07-0	114	%	53-150	03.31.2020 14:48	
Toluene-D8	2037-26-5	103	%	70-130	03.31.2020 14:48	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP30-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-030

Date Collected: 03.25.2020 10:09

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23200	252	43.2	mg/kg	03.26.2020 23:54		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.29.2020 17:02	U	1
Diesel Range Organics	C10C28DRO	<15.0	49.9	15.0	mg/kg	03.29.2020 17:02	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	03.29.2020 17:02	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	03.29.2020 17:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.29.2020 17:02	
o-Terphenyl	84-15-1	100	%	70-135	03.29.2020 17:02	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP30-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-030

Date Collected: 03.25.2020 10:09

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000205	0.000992	0.000205	mg/kg	03.31.2020 15:06	U	1
Toluene	108-88-3	<0.000992	0.00496	0.000992	mg/kg	03.31.2020 15:06	U	1
Ethylbenzene	100-41-4	<0.000333	0.000992	0.000333	mg/kg	03.31.2020 15:06	U	1
m,p-Xylenes	179601-23-1	<0.000433	0.00198	0.000433	mg/kg	03.31.2020 15:06	U	1
o-Xylene	95-47-6	<0.000977	0.000992	0.000977	mg/kg	03.31.2020 15:06	U	1
Total Xylenes	1330-20-7	<0.000433	0.000992	0.000433	mg/kg	03.31.2020 15:06	U	1
Total BTEX		<0.000205	0.000992	0.000205	mg/kg	03.31.2020 15:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	53-142	03.31.2020 15:06	
1,2-Dichloroethane-D4	17060-07-0	113	%	53-150	03.31.2020 15:06	
Toluene-D8	2037-26-5	104	%	70-130	03.31.2020 15:06	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP31-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-031

Date Collected: 03.25.2020 10:10

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21600	253	43.4	mg/kg	03.27.2020 15:52		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	49.8	14.9	mg/kg	03.29.2020 17:44	U	1
Diesel Range Organics	C10C28DRO	<14.9	49.8	14.9	mg/kg	03.29.2020 17:44	U	1
Oil Range Hydrocarbons	PHCG2835	<14.9	49.8	14.9	mg/kg	03.29.2020 17:44	U	1
Total TPH	PHC635	<14.9	49.8	14.9	mg/kg	03.29.2020 17:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.29.2020 17:44	
o-Terphenyl	84-15-1	101	%	70-135	03.29.2020 17:44	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP31-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-031

Date Collected: 03.25.2020 10:10

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000996	0.000206	mg/kg	03.31.2020 15:24	U	1
Toluene	108-88-3	<0.000996	0.00498	0.000996	mg/kg	03.31.2020 15:24	U	1
Ethylbenzene	100-41-4	<0.000334	0.000996	0.000334	mg/kg	03.31.2020 15:24	U	1
m,p-Xylenes	179601-23-1	<0.000435	0.00199	0.000435	mg/kg	03.31.2020 15:24	U	1
o-Xylene	95-47-6	<0.000981	0.000996	0.000981	mg/kg	03.31.2020 15:24	U	1
Total Xylenes	1330-20-7	<0.000435	0.000996	0.000435	mg/kg	03.31.2020 15:24	U	1
Total BTEX		<0.000206	0.000996	0.000206	mg/kg	03.31.2020 15:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	53-142	03.31.2020 15:24	
1,2-Dichloroethane-D4	17060-07-0	114	%	53-150	03.31.2020 15:24	
Toluene-D8	2037-26-5	103	%	70-130	03.31.2020 15:24	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP32-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-032

Date Collected: 03.25.2020 10:11

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18800	250	42.8	mg/kg	03.27.2020 00:06		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 18:05	U	1
Diesel Range Organics	C10C28DRO	20.0	50.0	15.0	mg/kg	03.29.2020 18:05	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.29.2020 18:05	U	1
Total TPH	PHC635	20.0	50.0	15.0	mg/kg	03.29.2020 18:05	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.29.2020 18:05	
o-Terphenyl	84-15-1	99	%	70-135	03.29.2020 18:05	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP32-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-032

Date Collected: 03.25.2020 10:11

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.00100	0.000207	mg/kg	03.31.2020 15:43	U	1
Toluene	108-88-3	<0.00100	0.00501	0.00100	mg/kg	03.31.2020 15:43	U	1
Ethylbenzene	100-41-4	<0.000336	0.00100	0.000336	mg/kg	03.31.2020 15:43	U	1
m,p-Xylenes	179601-23-1	0.000601	0.00200	0.000438	mg/kg	03.31.2020 15:43	J	1
o-Xylene	95-47-6	<0.000987	0.00100	0.000987	mg/kg	03.31.2020 15:43	U	1
Total Xylenes	1330-20-7	0.000601	0.00100	0.000438	mg/kg	03.31.2020 15:43	J	1
Total BTEX		0.000601	0.00100	0.000207	mg/kg	03.31.2020 15:43	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	53-142	03.31.2020 15:43	
1,2-Dichloroethane-D4	17060-07-0	114	%	53-150	03.31.2020 15:43	
Toluene-D8	2037-26-5	106	%	70-130	03.31.2020 15:43	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP33-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-033

Date Collected: 03.25.2020 10:13

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21800	250	42.8	mg/kg	03.27.2020 00:12		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 18:25	U	1
Diesel Range Organics	C10C28DRO	<15.0	50.0	15.0	mg/kg	03.29.2020 18:25	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.29.2020 18:25	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	03.29.2020 18:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.29.2020 18:25	
o-Terphenyl	84-15-1	100	%	70-135	03.29.2020 18:25	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **SP33-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-033

Date Collected: 03.25.2020 10:13

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.000998	0.000207	mg/kg	03.31.2020 16:01	U	1
Toluene	108-88-3	<0.000998	0.00499	0.000998	mg/kg	03.31.2020 16:01	U	1
Ethylbenzene	100-41-4	<0.000335	0.000998	0.000335	mg/kg	03.31.2020 16:01	U	1
m,p-Xylenes	179601-23-1	0.000918	0.00200	0.000436	mg/kg	03.31.2020 16:01	J	1
o-Xylene	95-47-6	<0.000983	0.000998	0.000983	mg/kg	03.31.2020 16:01	U	1
Total Xylenes	1330-20-7	0.000918	0.000998	0.000436	mg/kg	03.31.2020 16:01	J	1
Total BTEX		0.000918	0.000998	0.000207	mg/kg	03.31.2020 16:01	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	53-142	03.31.2020 16:01	
1,2-Dichloroethane-D4	17060-07-0	112	%	53-150	03.31.2020 16:01	
Toluene-D8	2037-26-5	103	%	70-130	03.31.2020 16:01	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP1-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-034

Date Collected: 03.25.2020 10:20

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	406	4.98	0.855	mg/kg	03.26.2020 21:47	X	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.29.2020 18:46	U	1
Diesel Range Organics	C10C28DRO	<15.0	49.9	15.0	mg/kg	03.29.2020 18:46	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	03.29.2020 18:46	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	03.29.2020 18:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	03.29.2020 18:46	
o-Terphenyl	84-15-1	102	%	70-135	03.29.2020 18:46	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP1-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-034

Date Collected: 03.25.2020 10:20

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000208	0.00100	0.000208	mg/kg	03.31.2020 16:20	U	1
Toluene	108-88-3	<0.00100	0.00502	0.00100	mg/kg	03.31.2020 16:20	U	1
Ethylbenzene	100-41-4	<0.000337	0.00100	0.000337	mg/kg	03.31.2020 16:20	U	1
m,p-Xylenes	179601-23-1	<0.000438	0.00201	0.000438	mg/kg	03.31.2020 16:20	U	1
o-Xylene	95-47-6	<0.000989	0.00100	0.000989	mg/kg	03.31.2020 16:20	U	1
Total Xylenes	1330-20-7	<0.000438	0.00100	0.000438	mg/kg	03.31.2020 16:20	U	1
Total BTEX		<0.000208	0.00100	0.000208	mg/kg	03.31.2020 16:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	53-142	03.31.2020 16:20	
1,2-Dichloroethane-D4	17060-07-0	111	%	53-150	03.31.2020 16:20	
Toluene-D8	2037-26-5	101	%	70-130	03.31.2020 16:20	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP2-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-035

Date Collected: 03.25.2020 10:22

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.32	5.04	0.865	mg/kg	03.26.2020 23:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	49.8	14.9	mg/kg	03.29.2020 19:07	U	1
Diesel Range Organics	C10C28DRO	<14.9	49.8	14.9	mg/kg	03.29.2020 19:07	U	1
Oil Range Hydrocarbons	PHCG2835	<14.9	49.8	14.9	mg/kg	03.29.2020 19:07	U	1
Total TPH	PHC635	<14.9	49.8	14.9	mg/kg	03.29.2020 19:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.29.2020 19:07	
o-Terphenyl	84-15-1	99	%	70-135	03.29.2020 19:07	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP2-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-035

Date Collected: 03.25.2020 10:22

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.000998	0.000207	mg/kg	03.31.2020 16:38	U	1
Toluene	108-88-3	<0.000998	0.00499	0.000998	mg/kg	03.31.2020 16:38	U	1
Ethylbenzene	100-41-4	<0.000335	0.000998	0.000335	mg/kg	03.31.2020 16:38	U	1
m,p-Xylenes	179601-23-1	<0.000436	0.00200	0.000436	mg/kg	03.31.2020 16:38	U	1
o-Xylene	95-47-6	<0.000983	0.000998	0.000983	mg/kg	03.31.2020 16:38	U	1
Total Xylenes	1330-20-7	<0.000436	0.000998	0.000436	mg/kg	03.31.2020 16:38	U	1
Total BTEX		<0.000207	0.000998	0.000207	mg/kg	03.31.2020 16:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	53-142	03.31.2020 16:38	
1,2-Dichloroethane-D4	17060-07-0	111	%	53-150	03.31.2020 16:38	
Toluene-D8	2037-26-5	103	%	70-130	03.31.2020 16:38	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP2-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-036

Date Collected: 03.25.2020 10:25

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.00	5.00	0.858	mg/kg	03.27.2020 00:18	J	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 19:28	U	1
Diesel Range Organics	C10C28DRO	<15.0	50.0	15.0	mg/kg	03.29.2020 19:28	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.29.2020 19:28	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	03.29.2020 19:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.29.2020 19:28	
o-Terphenyl	84-15-1	95	%	70-135	03.29.2020 19:28	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP2-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-036

Date Collected: 03.25.2020 10:25

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000994	0.000206	mg/kg	03.31.2020 16:56	U	1
Toluene	108-88-3	<0.000994	0.00497	0.000994	mg/kg	03.31.2020 16:56	U	1
Ethylbenzene	100-41-4	<0.000334	0.000994	0.000334	mg/kg	03.31.2020 16:56	U	1
m,p-Xylenes	179601-23-1	0.000447	0.00199	0.000434	mg/kg	03.31.2020 16:56	J	1
o-Xylene	95-47-6	<0.000979	0.000994	0.000979	mg/kg	03.31.2020 16:56	U	1
Total Xylenes	1330-20-7	0.000447	0.000994	0.000434	mg/kg	03.31.2020 16:56	J	1
Total BTEX		0.000447	0.000994	0.000206	mg/kg	03.31.2020 16:56	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	53-142	03.31.2020 16:56	
1,2-Dichloroethane-D4	17060-07-0	112	%	53-150	03.31.2020 16:56	
Toluene-D8	2037-26-5	105	%	70-130	03.31.2020 16:56	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP4-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-037

Date Collected: 03.25.2020 10:27

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	201	4.98	0.855	mg/kg	03.27.2020 00:24		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 19:49	U	1
Diesel Range Organics	C10C28DRO	26.0	50.0	15.0	mg/kg	03.29.2020 19:49	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.29.2020 19:49	U	1
Total TPH	PHC635	26.0	50.0	15.0	mg/kg	03.29.2020 19:49	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	03.29.2020 19:49	
o-Terphenyl	84-15-1	97	%	70-135	03.29.2020 19:49	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP4-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-037

Date Collected: 03.25.2020 10:27

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000994	0.000206	mg/kg	03.31.2020 17:14	U	1
Toluene	108-88-3	<0.000994	0.00497	0.000994	mg/kg	03.31.2020 17:14	U	1
Ethylbenzene	100-41-4	<0.000334	0.000994	0.000334	mg/kg	03.31.2020 17:14	U	1
m,p-Xylenes	179601-23-1	<0.000434	0.00199	0.000434	mg/kg	03.31.2020 17:14	U	1
o-Xylene	95-47-6	<0.000979	0.000994	0.000979	mg/kg	03.31.2020 17:14	U	1
Total Xylenes	1330-20-7	<0.000434	0.000994	0.000434	mg/kg	03.31.2020 17:14	U	1
Total BTEX		<0.000206	0.000994	0.000206	mg/kg	03.31.2020 17:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	53-142	03.31.2020 17:14	
1,2-Dichloroethane-D4	17060-07-0	113	%	53-150	03.31.2020 17:14	
Toluene-D8	2037-26-5	105	%	70-130	03.31.2020 17:14	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP5-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-038

Date Collected: 03.25.2020 10:29

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:00

Basis: Wet Weight

Seq Number: 3121250

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.06	4.98	0.855	mg/kg	03.27.2020 00:30		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.29.2020 20:10	U	1
Diesel Range Organics	C10C28DRO	<15.0	49.9	15.0	mg/kg	03.29.2020 20:10	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	03.29.2020 20:10	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	03.29.2020 20:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.29.2020 20:10	
o-Terphenyl	84-15-1	96	%	70-135	03.29.2020 20:10	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP5-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-038

Date Collected: 03.25.2020 10:29

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: NAL

% Moisture:

Analyst: NAL

Date Prep: 03.31.2020 11:00

Basis: Wet Weight

Seq Number: 3121544

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000994	0.000206	mg/kg	03.31.2020 17:33	U	1
Toluene	108-88-3	<0.000994	0.00497	0.000994	mg/kg	03.31.2020 17:33	U	1
Ethylbenzene	100-41-4	<0.000334	0.000994	0.000334	mg/kg	03.31.2020 17:33	U	1
m,p-Xylenes	179601-23-1	<0.000434	0.00199	0.000434	mg/kg	03.31.2020 17:33	U	1
o-Xylene	95-47-6	<0.000979	0.000994	0.000979	mg/kg	03.31.2020 17:33	U	1
Total Xylenes	1330-20-7	<0.000434	0.000994	0.000434	mg/kg	03.31.2020 17:33	U	1
Total BTEX		<0.000206	0.000994	0.000206	mg/kg	03.31.2020 17:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	53-142	03.31.2020 17:33	
1,2-Dichloroethane-D4	17060-07-0	112	%	53-150	03.31.2020 17:33	
Toluene-D8	2037-26-5	104	%	70-130	03.31.2020 17:33	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP6-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-039

Date Collected: 03.25.2020 10:31

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:05

Basis: Wet Weight

Seq Number: 3121256

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	32.3	5.00	0.858	mg/kg	03.27.2020 18:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	03.29.2020 20:30	U	1
Diesel Range Organics	C10C28DRO	<15.0	49.9	15.0	mg/kg	03.29.2020 20:30	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	03.29.2020 20:30	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	03.29.2020 20:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	03.29.2020 20:30	
o-Terphenyl	84-15-1	97	%	70-135	03.29.2020 20:30	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP6-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-039

Date Collected: 03.25.2020 10:31

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: CRL

% Moisture:

Analyst: CRL

Date Prep: 04.01.2020 13:30

Basis: Wet Weight

Seq Number: 3121691

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.000998	0.000207	mg/kg	04.01.2020 14:42	U	1
Toluene	108-88-3	<0.000998	0.00499	0.000998	mg/kg	04.01.2020 14:42	U	1
Ethylbenzene	100-41-4	<0.000335	0.000998	0.000335	mg/kg	04.01.2020 14:42	U	1
m,p-Xylenes	179601-23-1	<0.000436	0.00200	0.000436	mg/kg	04.01.2020 14:42	U	1
o-Xylene	95-47-6	<0.000983	0.000998	0.000983	mg/kg	04.01.2020 14:42	U	1
Total Xylenes	1330-20-7	<0.000436	0.000998	0.000436	mg/kg	04.01.2020 14:42	U	1
Total BTEX		<0.000207	0.000998	0.000207	mg/kg	04.01.2020 14:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	110	%	53-142	04.01.2020 14:42	
1,2-Dichloroethane-D4	17060-07-0	113	%	53-150	04.01.2020 14:42	
Toluene-D8	2037-26-5	95	%	70-130	04.01.2020 14:42	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP7-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-040

Date Collected: 03.25.2020 10:34

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:05

Basis: Wet Weight

Seq Number: 3121256

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	389	5.04	0.865	mg/kg	03.27.2020 18:26		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.29.2020 13:00

Basis: Wet Weight

Seq Number: 3121322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.29.2020 20:51	U	1
Diesel Range Organics	C10C28DRO	18.7	50.0	15.0	mg/kg	03.29.2020 20:51	J	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.29.2020 20:51	U	1
Total TPH	PHC635	18.7	50.0	15.0	mg/kg	03.29.2020 20:51	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	03.29.2020 20:51	
o-Terphenyl	84-15-1	95	%	70-135	03.29.2020 20:51	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP7-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-040

Date Collected: 03.25.2020 10:34

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: CRL

% Moisture:

Analyst: CRL

Date Prep: 04.01.2020 13:30

Basis: Wet Weight

Seq Number: 3121691

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000205	0.000990	0.000205	mg/kg	04.01.2020 15:06	U	1
Toluene	108-88-3	<0.000990	0.00495	0.000990	mg/kg	04.01.2020 15:06	U	1
Ethylbenzene	100-41-4	<0.000332	0.000990	0.000332	mg/kg	04.01.2020 15:06	U	1
m,p-Xylenes	179601-23-1	<0.000432	0.00198	0.000432	mg/kg	04.01.2020 15:06	U	1
o-Xylene	95-47-6	<0.000975	0.000990	0.000975	mg/kg	04.01.2020 15:06	U	1
Total Xylenes	1330-20-7	<0.000432	0.000990	0.000432	mg/kg	04.01.2020 15:06	U	1
Total BTEX		<0.000205	0.000990	0.000205	mg/kg	04.01.2020 15:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	114	%	53-142	04.01.2020 15:06	
1,2-Dichloroethane-D4	17060-07-0	118	%	53-150	04.01.2020 15:06	
Toluene-D8	2037-26-5	96	%	70-130	04.01.2020 15:06	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP8-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-041

Date Collected: 03.25.2020 10:36

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.26.2020 16:05

Basis: Wet Weight

Seq Number: 3121256

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	346	4.98	0.855	mg/kg	03.27.2020 18:32		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.30.2020 15:00

Basis: Wet Weight

Seq Number: 3121479

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	03.31.2020 07:43	U	1
Diesel Range Organics	C10C28DRO	<15.0	50.0	15.0	mg/kg	03.31.2020 07:43	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	03.31.2020 07:43	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	03.31.2020 07:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-130	03.31.2020 07:43	
o-Terphenyl	84-15-1	78	%	70-130	03.31.2020 07:43	



Certificate of Analytical Results 656945

Sport Environmental Services, LLC, Midland, TX Sundown Energy, LP

Sample Id: **HDP8-S001 @ Surface**

Matrix: Soil

Date Received: 03.26.2020 10:25

Lab Sample Id: 656945-041

Date Collected: 03.25.2020 10:36

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: CRL

% Moisture:

Analyst: CRL

Date Prep: 04.01.2020 13:30

Basis: Wet Weight

Seq Number: 3121691

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000206	0.000996	0.000206	mg/kg	04.01.2020 15:29	U	1
Toluene	108-88-3	<0.000996	0.00498	0.000996	mg/kg	04.01.2020 15:29	U	1
Ethylbenzene	100-41-4	<0.000334	0.000996	0.000334	mg/kg	04.01.2020 15:29	U	1
m,p-Xylenes	179601-23-1	<0.000435	0.00199	0.000435	mg/kg	04.01.2020 15:29	U	1
o-Xylene	95-47-6	<0.000981	0.000996	0.000981	mg/kg	04.01.2020 15:29	U	1
Total Xylenes	1330-20-7	<0.000435	0.000996	0.000435	mg/kg	04.01.2020 15:29	U	1
Total BTEX		<0.000206	0.000996	0.000206	mg/kg	04.01.2020 15:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	114	%	53-142	04.01.2020 15:29	
1,2-Dichloroethane-D4	17060-07-0	115	%	53-150	04.01.2020 15:29	
Toluene-D8	2037-26-5	94	%	70-130	04.01.2020 15:29	

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

Sport Environmental Services, LLC
Sundown Energy, LP

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3121102

MB Sample Id: 7699865-1-BLK

Matrix: Solid

LCS Sample Id: 7699865-1-BKS

Prep Method: E300P

Date Prep: 03.26.2020

LCSD Sample Id: 7699865-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	246	98	236	94	90-110	4	20	mg/kg	03.26.2020 19:13	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3121250

MB Sample Id: 7699866-1-BLK

Matrix: Solid

LCS Sample Id: 7699866-1-BKS

Prep Method: E300P

Date Prep: 03.26.2020

LCSD Sample Id: 7699866-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	250	100	244	98	90-110	2	20	mg/kg	03.26.2020 21:35	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3121256

MB Sample Id: 7699868-1-BLK

Matrix: Solid

LCS Sample Id: 7699868-1-BKS

Prep Method: E300P

Date Prep: 03.26.2020

LCSD Sample Id: 7699868-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	254	102	245	98	90-110	4	20	mg/kg	03.27.2020 18:00	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3121102

Parent Sample Id: 656972-003

Matrix: Soil

MS Sample Id: 656972-003 S

Prep Method: E300P

Date Prep: 03.26.2020

MSD Sample Id: 656972-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	60.6	249	300	96	299	96	90-110	0	20	mg/kg	03.26.2020 19:29	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3121102

Parent Sample Id: 656972-004

Matrix: Soil

MS Sample Id: 656972-004 S

Prep Method: E300P

Date Prep: 03.26.2020

MSD Sample Id: 656972-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.95	250	260	100	259	100	90-110	0	20	mg/kg	03.26.2020 20:42	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3121250

Parent Sample Id: 656945-034

Matrix: Soil

MS Sample Id: 656945-034 S

Prep Method: E300P

Date Prep: 03.26.2020

MSD Sample Id: 656945-034 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	406	249	624	88	622	87	90-110	0	20	mg/kg	03.26.2020 21:53	X

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

Sport Environmental Services, LLC
Sundown Energy, LP

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3121250

Parent Sample Id: 656945-035

Matrix: Soil

MS Sample Id: 656945-035 S

Prep Method: E300P

Date Prep: 03.26.2020

MSD Sample Id: 656945-035 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.32	252	241	93	240	92	90-110	0	20	mg/kg	03.26.2020 23:17	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3121256

Parent Sample Id: 656945-039

Matrix: Soil

MS Sample Id: 656945-039 S

Prep Method: E300P

Date Prep: 03.26.2020

MSD Sample Id: 656945-039 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	32.3	252	307	109	295	104	90-110	4	20	mg/kg	03.27.2020 18:16	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3121256

Parent Sample Id: 656956-003

Matrix: Soil

MS Sample Id: 656956-003 S

Prep Method: E300P

Date Prep: 03.26.2020

MSD Sample Id: 656956-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	106	250	373	107	369	105	90-110	1	20	mg/kg	03.27.2020 19:29	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121322

MB Sample Id: 7700017-1-BLK

Matrix: Solid

LCS Sample Id: 7700017-1-BKS

Prep Method: SW8015P

Date Prep: 03.29.2020

LCSD Sample Id: 7700017-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1020	102	1000	100	70-135	2	20	mg/kg	03.29.2020 12:01	
Diesel Range Organics	<15.0	1000	1120	112	1070	107	70-135	5	20	mg/kg	03.29.2020 12:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		105		102		70-135	%	03.29.2020 12:01
o-Terphenyl	122		116		109		70-135	%	03.29.2020 12:01

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121324

MB Sample Id: 7700018-1-BLK

Matrix: Solid

LCS Sample Id: 7700018-1-BKS

Prep Method: SW8015P

Date Prep: 03.29.2020

LCSD Sample Id: 7700018-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	969	97	985	99	70-135	2	20	mg/kg	03.29.2020 21:53	
Diesel Range Organics	<15.0	1000	1050	105	1060	106	70-135	1	20	mg/kg	03.29.2020 21:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		99		102		70-135	%	03.29.2020 21:53
o-Terphenyl	120		105		107		70-135	%	03.29.2020 21:53

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

Sport Environmental Services, LLC
Sundown Energy, LP

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121479

MB Sample Id: 7700076-1-BLK

Matrix: Solid

LCS Sample Id: 7700076-1-BKS

Prep Method: SW8015P

Date Prep: 03.30.2020

LCSD Sample Id: 7700076-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	861	86	835	84	70-130	3	20	mg/kg	03.31.2020 03:03	
Diesel Range Organics	<15.0	1000	922	92	890	89	70-130	4	20	mg/kg	03.31.2020 03:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	79		99		100		70-130	%	03.31.2020 03:03
o-Terphenyl	83		95		88		70-130	%	03.31.2020 03:03

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121322

Matrix: Solid

MB Sample Id: 7700017-1-BLK

Prep Method: SW8015P

Date Prep: 03.29.2020

Parameter	MB Result	Units	Analysis Date	Flag
Oil Range Hydrocarbons	<15.0	mg/kg	03.29.2020 11:40	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121324

Matrix: Solid

MB Sample Id: 7700018-1-BLK

Prep Method: SW8015P

Date Prep: 03.29.2020

Parameter	MB Result	Units	Analysis Date	Flag
Oil Range Hydrocarbons	<15.0	mg/kg	03.29.2020 21:33	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121479

Matrix: Solid

MB Sample Id: 7700076-1-BLK

Prep Method: SW8015P

Date Prep: 03.30.2020

Parameter	MB Result	Units	Analysis Date	Flag
Oil Range Hydrocarbons	<15.0	mg/kg	03.31.2020 02:45	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121322

Matrix: Soil

Parent Sample Id: 656945-021

MS Sample Id: 656945-021 S

Prep Method: SW8015P

Date Prep: 03.29.2020

MSD Sample Id: 656945-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	997	994	100	1040	104	70-135	5	20	mg/kg	03.29.2020 13:03	
Diesel Range Organics	33.7	997	1080	105	1100	107	70-135	2	20	mg/kg	03.29.2020 13:03	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		104		70-135	%	03.29.2020 13:03
o-Terphenyl	104		105		70-135	%	03.29.2020 13:03

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

Sport Environmental Services, LLC
Sundown Energy, LP

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121324

Parent Sample Id: 656945-001

Matrix: Soil

MS Sample Id: 656945-001 S

Prep Method: SW8015P

Date Prep: 03.29.2020

MSD Sample Id: 656945-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	997	931	93	965	97	70-135	4	20	mg/kg	03.29.2020 22:56	
Diesel Range Organics	1140	997	2160	102	2170	103	70-135	0	20	mg/kg	03.29.2020 22:56	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		100		70-135	%	03.29.2020 22:56
o-Terphenyl	114		113		70-135	%	03.29.2020 22:56

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121479

Parent Sample Id: 657218-002

Matrix: Soil

MS Sample Id: 657218-002 S

Prep Method: SW8015P

Date Prep: 03.30.2020

MSD Sample Id: 657218-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<14.9	996	893	90	872	87	70-130	2	20	mg/kg	03.31.2020 03:59	
Diesel Range Organics	<14.9	996	963	97	943	94	70-130	2	20	mg/kg	03.31.2020 03:59	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		96		70-130	%	03.31.2020 03:59
o-Terphenyl	92		94		70-130	%	03.31.2020 03:59

Analytical Method: BTEX by SW 8260C

Seq Number: 3121345

MB Sample Id: 7700058-1-BLK

Matrix: Solid

LCS Sample Id: 7700058-1-BKS

Prep Method: SW5035A

Date Prep: 03.30.2020

LCSD Sample Id: 7700058-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000207	0.0500	0.0416	83	0.0432	86	62-132	4	25	mg/kg	03.30.2020 09:18	
Toluene	<0.00100	0.0500	0.0445	89	0.0465	93	66-124	4	25	mg/kg	03.30.2020 09:18	
Ethylbenzene	<0.000336	0.0500	0.0448	90	0.0478	96	71-134	6	25	mg/kg	03.30.2020 09:18	
m,p-Xylenes	<0.000437	0.100	0.0909	91	0.0956	96	69-128	5	25	mg/kg	03.30.2020 09:18	
o-Xylene	<0.000985	0.0500	0.0479	96	0.0494	99	72-131	3	25	mg/kg	03.30.2020 09:18	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	96		100		97		53-142	%	03.30.2020 09:18
1,2-Dichloroethane-D4	107		102		100		53-150	%	03.30.2020 09:18
Toluene-D8	105		108		107		70-130	%	03.30.2020 09:18

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

Sport Environmental Services, LLC
Sundown Energy, LP

Analytical Method: BTEX by SW 8260C

Seq Number: 3121419

MB Sample Id: 7700127-1-BLK

Matrix: Solid

LCS Sample Id: 7700127-1-BKS

Prep Method: SW5035A

Date Prep: 03.30.2020

LCSD Sample Id: 7700127-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000207	0.0500	0.0418	84	0.0447	89	62-132	7	25	mg/kg	03.30.2020 21:04	
Toluene	<0.00100	0.0500	0.0434	87	0.0462	92	66-124	6	25	mg/kg	03.30.2020 21:04	
Ethylbenzene	<0.000336	0.0500	0.0448	90	0.0475	95	71-134	6	25	mg/kg	03.30.2020 21:04	
m,p-Xylenes	<0.000437	0.100	0.0896	90	0.0947	95	69-128	6	25	mg/kg	03.30.2020 21:04	
o-Xylene	<0.000985	0.0500	0.0458	92	0.0494	99	72-131	8	25	mg/kg	03.30.2020 21:04	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
Dibromofluoromethane	94		94		96		53-142			%	03.30.2020 21:04	
1,2-Dichloroethane-D4	107		100		100		53-150			%	03.30.2020 21:04	
Toluene-D8	105		105		105		70-130			%	03.30.2020 21:04	

Analytical Method: BTEX by SW 8260C

Seq Number: 3121544

MB Sample Id: 7700212-1-BLK

Matrix: Solid

LCS Sample Id: 7700212-1-BKS

Prep Method: SW5035A

Date Prep: 03.31.2020

LCSD Sample Id: 7700212-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000207	0.0500	0.0508	102	0.0433	87	62-132	16	25	mg/kg	03.31.2020 09:19	
Toluene	<0.00100	0.0500	0.0530	106	0.0453	91	66-124	16	25	mg/kg	03.31.2020 09:19	
Ethylbenzene	<0.000336	0.0500	0.0540	108	0.0461	92	71-134	16	25	mg/kg	03.31.2020 09:19	
m,p-Xylenes	<0.000437	0.100	0.108	108	0.0931	93	69-128	15	25	mg/kg	03.31.2020 09:19	
o-Xylene	<0.000985	0.0500	0.0565	113	0.0491	98	72-131	14	25	mg/kg	03.31.2020 09:19	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
Dibromofluoromethane	94		98		98		53-142			%	03.31.2020 09:19	
1,2-Dichloroethane-D4	105		106		104		53-150			%	03.31.2020 09:19	
Toluene-D8	107		106		107		70-130			%	03.31.2020 09:19	

Analytical Method: BTEX by SW 8260C

Seq Number: 3121691

MB Sample Id: 7700320-1-BLK

Matrix: Solid

LCS Sample Id: 7700320-1-BKS

Prep Method: SW5030B

Date Prep: 04.01.2020

LCSD Sample Id: 7700320-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000207	0.0500	0.0508	102	0.0520	104	62-132	2	25	mg/kg	04.01.2020 10:56	
Toluene	<0.00100	0.0500	0.0461	92	0.0474	95	66-124	3	25	mg/kg	04.01.2020 10:56	
Ethylbenzene	<0.000336	0.0500	0.0434	87	0.0440	88	71-134	1	25	mg/kg	04.01.2020 10:56	
m,p-Xylenes	<0.000437	0.100	0.0925	93	0.0932	93	69-128	1	25	mg/kg	04.01.2020 10:56	
o-Xylene	<0.000985	0.0500	0.0445	89	0.0459	92	72-131	3	25	mg/kg	04.01.2020 10:56	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
Dibromofluoromethane	112		111		114		53-142			%	04.01.2020 10:56	
1,2-Dichloroethane-D4	112		111		112		53-150			%	04.01.2020 10:56	
Toluene-D8	95		95		95		70-130			%	04.01.2020 10:56	

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

Sport Environmental Services, LLC
Sundown Energy, LP

Analytical Method: BTEX by SW 8260C

Seq Number: 3121345

Parent Sample Id: 657201-002

Matrix: Soil

MS Sample Id: 657201-002 S

Prep Method: SW5035A

Date Prep: 03.30.2020

MSD Sample Id: 657201-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000288	0.0695	0.0450	65	0.0451	65	62-132	0	25	mg/kg	03.30.2020 10:34	
Toluene	<0.00139	0.0695	0.0465	67	0.0460	66	66-124	1	25	mg/kg	03.30.2020 10:34	
Ethylbenzene	<0.000467	0.0695	0.0479	69	0.0486	70	71-134	1	25	mg/kg	03.30.2020 10:34	X
m,p-Xylenes	<0.000607	0.139	0.0958	69	0.0958	69	69-128	0	25	mg/kg	03.30.2020 10:34	
o-Xylene	<0.00137	0.0695	0.0483	69	0.0471	68	72-131	3	25	mg/kg	03.30.2020 10:34	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	105		103		53-142	%	03.30.2020 10:34
1,2-Dichloroethane-D4	115		114		53-150	%	03.30.2020 10:34
Toluene-D8	105		105		70-130	%	03.30.2020 10:34

Analytical Method: BTEX by SW 8260C

Seq Number: 3121544

Parent Sample Id: 656945-019

Matrix: Soil

MS Sample Id: 656945-019 S

Prep Method: SW5035A

Date Prep: 03.31.2020

MSD Sample Id: 656945-019 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000207	0.0500	0.0332	66	0.0317	63	62-132	5	25	mg/kg	03.31.2020 10:03	
Toluene	<0.00100	0.0500	0.0300	60	0.0283	57	66-124	6	25	mg/kg	03.31.2020 10:03	X
Ethylbenzene	0.000411	0.0500	0.0248	49	0.0221	43	71-134	12	25	mg/kg	03.31.2020 10:03	X
m,p-Xylenes	0.00170	0.100	0.0496	48	0.0440	42	69-128	12	25	mg/kg	03.31.2020 10:03	X
o-Xylene	<0.000985	0.0500	0.0258	52	0.0226	45	72-131	13	25	mg/kg	03.31.2020 10:03	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	107		102		53-142	%	03.31.2020 10:03
1,2-Dichloroethane-D4	115		110		53-150	%	03.31.2020 10:03
Toluene-D8	107		105		70-130	%	03.31.2020 10:03

Analytical Method: BTEX by SW 8260C

Seq Number: 3121419

Parent Sample Id: 657045-010

Matrix: Soil

MS Sample Id: 657045-010 S

Prep Method: SW5035A

Date Prep: 03.30.2020

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	0.105	1.04	1.07	93	62-132	mg/kg	03.30.2020 21:59	
Toluene	<0.0209	1.04	1.16	112	66-124	mg/kg	03.30.2020 21:59	
Ethylbenzene	0.500	1.04	1.64	110	71-134	mg/kg	03.30.2020 21:59	
m,p-Xylenes	<0.00911	2.09	2.35	112	69-128	mg/kg	03.30.2020 21:59	
o-Xylene	<0.0206	1.04	1.20	115	72-131	mg/kg	03.30.2020 21:59	

Surrogate

	MS %Rec	MS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	90		53-142	%	03.30.2020 21:59
1,2-Dichloroethane-D4	97		53-150	%	03.30.2020 21:59
Toluene-D8	116		70-130	%	03.30.2020 21:59

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

Sport Environmental Services, LLC
Sundown Energy, LP

Analytical Method: BTEX by SW 8260C

Seq Number: 3121691

Parent Sample Id: 657265-022

Matrix: Soil

MS Sample Id: 657265-022 S

Prep Method: SW5030B

Date Prep: 04.01.2020

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.000206	0.0497	0.0306	62	62-132	mg/kg	04.01.2020 11:48	
Toluene	<0.000994	0.0497	0.0275	55	66-124	mg/kg	04.01.2020 11:48	X
Ethylbenzene	<0.000334	0.0497	0.0258	52	71-134	mg/kg	04.01.2020 11:48	X
m,p-Xylenes	<0.000434	0.0994	0.0540	54	69-128	mg/kg	04.01.2020 11:48	X
o-Xylene	<0.000979	0.0497	0.0261	53	72-131	mg/kg	04.01.2020 11:48	X

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	113		53-142	%	04.01.2020 11:48
1,2-Dichloroethane-D4	118		53-150	%	04.01.2020 11:48
Toluene-D8	94		70-130	%	04.01.2020 11:48

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



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: 1054945

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Project Manager:	Debi Moore	Bill To: (if different)	
Company Name:	Sport Environmental Services, LLC	Company Name:	
Address:	502 N Big Spring Street	Address:	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone:	432-683-1100	Email:	debi@sportenv.com climga@sportenv.com clin@sportenv.com

Program: UST/PS ☐ P ☐ Brownfield ☐ RC Superfund ☐	
State of Project:	
Reporting Level: ☐ Level ☐ PST/IT ☐ TRP ☐ Lev ☐ IV	Deliverables: EDI ☐ ADAP ☐ Other:

Project Name:	Sundown Energy, LP	Turn Around	
Project Number:	Catena Lease, S Vac Unit 27 #003 Release	Routine: X	
P.O. Number:		Rush:	
Sampler's Name:	Lan Bundy	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐
Temperature (°C):	5.85.5	Thermometer ID		
Received Intact:	Yes ☒ No ☐	Correction Factor:		
Cooler Custody Seals:	Yes ☒ No ☐	Total Containers:		
Sample Custody Seals:	Yes ☒ No ☐			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST										Work Order Notes
SP1 - S001 @ surface	S	3/25/2020	0930	surface	1	X	X	X	X	X	X	X	X	X	X	
SP2 - S001 @ surface	S	3/25/2020	0932	surface	1	X	X	X	X	X	X	X	X	X	X	
SP3 - S001 @ surface	S	3/25/2020	0934	surface	1	X	X	X	X	X	X	X	X	X	X	
SP4 - S001 @ surface	S	3/25/2020	0936	surface	1	X	X	X	X	X	X	X	X	X	X	
SP5 - S001 @ surface	S	3/25/2020	0938	surface	1	X	X	X	X	X	X	X	X	X	X	
SP6 - S001 @ surface	S	3/25/2020	0940	surface	1	X	X	X	X	X	X	X	X	X	X	
SP7 - S001 @ surface	S	3/25/2020	0942	surface	1	X	X	X	X	X	X	X	X	X	X	
SP8 - S001 @ surface	S	3/25/2020	0944	surface	1	X	X	X	X	X	X	X	X	X	X	
SP9 - S001 @ surface	S	3/25/2020	0946	surface	1	X	X	X	X	X	X	X	X	X	X	
SP10 - S001 @ surface	S	3/25/2020	0947	surface	1	X	X	X	X	X	X	X	X	X	X	
SP11 - S001 @ surface	S	3/25/2020	0948	surface	1	X	X	X	X	X	X	X	X	X	X	

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		1631 / 245.1 / 7470 / 7471 : Hg

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.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 / [Signature]	1 [Signature]	3-25-20 8am	2 [Signature]	2 [Signature]	3/25/20
3 / [Signature]					
5					



2 of 4

Chain of Custody

Work Order No: 10546945

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)

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Page 1 of 2

Project Manager:	Debi Moore	Bill to: (if different)	
Company Name:	Sport Environmental Services, LLC	Company Name:	
Address:	502 N Big Spring Street	Address:	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone:	432-683-1100	Email:	debi@sporenv.com cianna@sporenv.com clint@sporenv.com

Work Order Comments	
Program: UST/PS ☐ PF ☐ Brownfield ☐ RC ☐ Superfund ☐	
State of Project:	
Reporting Level: ☐ Level ☐ PST/Le ☐ T ☐ RP ☐ Le ☐ IV	
Deliverables: EDI ☐ ADAP ☐ Other:	

Project Name:	Sundown Energy, LP	Turn Around	
Project Number:	Catena Lease, S Vac Unit 27 #003 Release	Routine: X	
P.O. Number:		Rush:	
Sampler's Name:	Lan Bundy	Due Date:	
SAMPLE RECEIPT			
Temperature (°C):		Temp Blank:	Yes No
Received Intact:	Yes No	Thermometer ID	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST																Work Order Notes	
SP12 - S001 @ surface	S	3/25/2020	0949	surface	1	X	X	X	X												TAT starts the day received by the lab, if received by 4:30pm	Sample Comments
SP13 - S001 @ surface	S	3/25/2020	0950	surface	1	X	X	X	X													
SP14 - S001 @ surface	S	3/25/2020	0951	surface	1	X	X	X	X													
SP15 - S001 @ surface	S	3/25/2020	0952	surface	1	X	X	X	X													
SP16 - S001 @ surface	S	3/25/2020	0953	surface	1	X	X	X	X													
SP17 - S001 @ surface	S	3/25/2020	0954	surface	1	X	X	X	X													
SP18 - S001 @ surface	S	3/25/2020	0955	surface	1	X	X	X	X													
SP19 - S001 @ surface	S	3/25/2020	0956	surface	1	X	X	X	X													
SP20 - S001 @ surface	S	3/25/2020	0957	surface	1	X	X	X	X													
SP21 - S001 @ surface	S	3/25/2020	0958	surface	1	X	X	X	X													
SP22 - S001 @ surface	S	3/25/2020	0959	surface	1	X	X	X	X													

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time



3 of 4

Chain of Custody

Work Order No:

USL6945

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)

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Page 1 of 2

Project Manager:	Debi Moore	Bill to: (if different)	
Company Name:	Sport Environmental Services, LLC	Company Name:	
Address:	502 N Big Spring Street	Address:	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone:	432-683-1100	Email:	debi@sportenv.com cianna@sportenv.com client@sportenv.com

Program: UST/PS ☐ P ☐ Brownfield ☐ KC Super ☐ Id	
State of Project:	
Reporting Level: ☐ Level ☐ PST/ ☐ T ☐ RP Le ☐ IV	Deliverables: ED ☐ ADAP ☐ Other:

Project Name:	Sundown Energy, LP	Turn Around		ANALYSIS REQUEST	Work Order Notes
Project Number:	Catena Lease, S Vac Unit 27 #003 Release	Routine: X			
P.O. Number:		Rush:			
Sampler's Name:	Lan Bundy	Due Date:			
SAMPLE RECEIPT					
Temperature (°C):		Temp Blank:	Yes No	Wet Ice:	Yes No
Received Inact:	Yes No	Thermometer ID			
Cooler Custody Seals:	Yes No N/A	Correction Factor:			
Sample Custody Seals:	Yes No N/A	Total Containers:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers																Sample Comments
					300_ORGFMS - Chlorides	8015B_DRO - DRO/MRO	8015B_GRO	8260B_BTEx													
SP23 - S001 @ surface	S	3/25/2020	1000	surface	1	X	X	X	X												
SP24 - S001 @ surface	S	3/25/2020	1001	surface	1	X	X	X	X												
SP25 - S001 @ surface	S	3/25/2020	1002	surface	1	X	X	X	X												
SP26 - S001 @ surface	S	3/25/2020	1003	surface	1	X	X	X	X												
SP27 - S001 @ surface	S	3/25/2020	1005	surface	1	X	X	X	X												
SP28 - S001 @ surface	S	3/25/2020	1006	surface	1	X	X	X	X												
SP29 - S001 @ surface	S	3/25/2020	1008	surface	1	X	X	X	X												
SP30 - S001 @ surface	S	3/25/2020	1009	surface	1	X	X	X	X												
SP31 - S001 @ surface	S	3/25/2020	1010	surface	1	X	X	X	X												
SP32 - S001 @ surface	S	3/25/2020	1011	surface	1	X	X	X	X												
SP33 - S001 @ surface	S	3/25/2020	1013	surface	1	X	X	X	X												

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010:	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3-25-20 2pm			

Inter-Office Shipment

IOS Number : 61049

Date/Time: 03.26.2020

Created by: Brianna Teel

Please send report to: John Builes

Lab# From: **Midland**

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: **Houston**

Air Bill No.: 770114981301

E-Mail: john.builes@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
656945-001	S	SP1-S001 @ Surface	03.25.2020 09:30	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-002	S	SP2-S001 @ Surface	03.25.2020 09:32	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-003	S	SP3-S001 @ Surface	03.25.2020 09:34	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-004	S	SP4-S001 @ Surface	03.25.2020 09:36	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-005	S	SP5-S001 @ Surface	03.25.2020 09:38	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-006	S	SP6-S001 @ Surface	03.25.2020 09:40	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-007	S	SP7-S001 @ Surface	03.25.2020 09:42	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-008	S	SP8-S001 @ Surface	03.25.2020 09:44	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-009	S	SP9-S001 @ Surface	03.25.2020 09:46	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-010	S	SP10-S001 @ Surface	03.25.2020 09:47	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-011	S	SP11-S001 @ Surface	03.25.2020 09:48	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-012	S	SP12-S001 @ Surface	03.25.2020 09:49	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-013	S	SP13-S001 @ Surface	03.25.2020 09:50	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-014	S	SP14-S001 @ Surface	03.25.2020 09:51	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-015	S	SP15-S001 @ Surface	03.25.2020 09:52	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-016	S	SP16-S001 @ Surface	03.25.2020 09:53	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-017	S	SP17-S001 @ Surface	03.25.2020 09:54	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-018	S	SP18-S001 @ Surface	03.25.2020 09:55	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-019	S	SP19-S001 @ Surface	03.25.2020 09:56	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-020	S	SP20-S001 @ Surface	03.25.2020 09:57	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-021	S	SP21-S001 @ Surface	03.25.2020 09:58	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-022	S	SP22-S001 @ Surface	03.25.2020 09:59	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-023	S	SP23-S001 @ Surface	03.25.2020 10:00	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-024	S	SP24-S001 @ Surface	03.25.2020 10:01	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-025	S	SP25-S001 @ Surface	03.25.2020 10:02	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	

Inter-Office Shipment

IOS Number : 61049

Date/Time: 03.26.2020

Created by: Brianna Teel

Please send report to: John Builes

Lab# From: **Midland**

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: **Houston**

Air Bill No.: 770114981301

E-Mail: john.builes@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
656945-026	S	SP26-S001 @ Surface	03.25.2020 10:03	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-027	S	SP27-S001 @ Surface	03.25.2020 10:05	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-028	S	SP28-S001 @ Surface	03.25.2020 10:06	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-029	S	SP29-S001 @ Surface	03.25.2020 10:08	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-030	S	SP30-S001 @ Surface	03.25.2020 10:09	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-031	S	SP31-S001 @ Surface	03.25.2020 10:10	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-032	S	SP32-S001 @ Surface	03.25.2020 10:11	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-033	S	SP33-S001 @ Surface	03.25.2020 10:13	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-034	S	HDP1-S001 @ Surface	03.25.2020 10:20	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-035	S	HDP2-S001 @ Surface	03.25.2020 10:22	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-036	S	HDP2-S001 @ Surface	03.25.2020 10:25	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-037	S	HDP4-S001 @ Surface	03.25.2020 10:27	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-038	S	HDP5-S001 @ Surface	03.25.2020 10:29	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-039	S	HDP6-S001 @ Surface	03.25.2020 10:31	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-040	S	HDP7-S001 @ Surface	03.25.2020 10:34	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	
656945-041	S	HDP8-S001 @ Surface	03.25.2020 10:36	SW8260CBTEX	BTEX by SW 8260C	04.01.2020	04.08.2020	JHB	BZ BZME EBZ XYLENE	

Inter Office Shipment or Sample Comments:

Relinquished By:



Brianna Teel

Date Relinquished: 03.26.2020

Received By:



Monica Benavides

Date Received: 03.27.2020

Cooler Temperature: 1.9



XENCO Laboratories



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 61049

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : HOU-068

Sent By: Brianna Teel

Date Sent: 03.26.2020 10.39 AM

Received By: Lisandra Torres

Date Received: 03.27.2020 09.22 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.9
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Monica Benavides

Date: 03.27.2020

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Sport Environmental Services, LLC

Date/ Time Received: 03.26.2020 10.25.00 AM

Work Order #: 656945

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	5.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes Xenco Stafford-BTEX8260
#18 Water VOC samples have zero headspace?	Yes

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 03.26.2020

Checklist reviewed by:



John Builes

Date: 03.27.2020

Attachment F

Boring Log

Boring Log

Client: Sundown Energy, LP

Site Name: Catena Lease - South Vacuum 27 #003

Date: May 27, 2020

Location: 32.71451, -103.43543

Drilling Company: Talon LPE

Drill Type: Air Rotary Drilling Rig

Depth (ft.)	Notes
Surface	The top 9" of sandy soil have been removed. Large rocks are present and consistent throughout the release footprint.
1	Large rocks -- poorly graded. Strong hydrochloric acid reaction. Dark gray (10YR 4/1) soil. Some very fine organic material (i.e., plant roots)
2	Large rocks -- poorly graded. Strong hydrochloric acid reaction. Dark gray (10YR 4/1) soil. Some coarse sand.
3	Large gravel and coarse sand. Poorly graded. Strong hydrochloric acid reaction. Brown (10YR 4/3) soil.
4	Some coarse sand. Poorly graded. Strong hydrochloric acid reaction. Brown (10YR 4/3) soil. No organic matter.
5	Some coarse sand. Poorly graded. Strong hydrochloric acid reaction. Brown (10YR 4/3) soil. No organic matter.
6	
7	
8	
9	Very fine sand -- poorly graded. Some coarse sand. Very pale brown (10YR 7/3). Strong hydrochloric acid reaction.
10	
11	
12	
13	Very fine sand -- poorly graded. Very pale brown (10YR 8/3). Strong hydrochloric acid reaction.
14	
15	
16	
17	Very fine sand -- poorly graded. Very pale brown (10YR 8/3). Strong hydrochloric acid reaction.
18	
19	
20	

Borehole Terminated

Other Notes: No unusual odors or visible presence of oil was observed at the time these borings were conducted. Soil characteristics were similar at all locations.

Attachment G

Laboratory Analytical Reports (May 27, 2020)



Certificate of Analysis Summary 662867

Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15
Report Date: 06.03.2020 08:19
Project Manager: John Builes

<i>Analysis Requested</i>	<i>Lab Id:</i>	662867-001	662867-002	662867-003	662867-004	662867-005	662867-006
	<i>Field Id:</i>	ARB1-001 1'bgs	ARB1-001 2'bgs	ARB1-001 4'bgs	ARB1-001 10'bgs	ARB1-001 15'bgs	ARB1-001 20'bgs
	<i>Depth:</i>	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	05.27.2020 07:25	05.27.2020 07:52	05.27.2020 07:54	05.27.2020 07:55	05.27.2020 07:56	05.27.2020 07:57
Inorganic Anions by EPA 300	<i>Extracted:</i>	05.29.2020 12:35	05.29.2020 12:35	05.29.2020 12:35	05.29.2020 12:35	05.29.2020 12:35	05.29.2020 12:35
	<i>Analyzed:</i>	05.31.2020 15:31	05.31.2020 15:36	05.31.2020 15:41	05.31.2020 15:56	05.31.2020 16:01	05.31.2020 16:17
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2270 24.9	250 4.99	47.2 5.01	15.1 4.96	14.0 5.04	14.0 5.05

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John Builes
Project Manager



Certificate of Analysis Summary 662867

Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15

Report Date: 06.03.2020 08:19

Project Manager: John Builes

Analysis Requested	Lab Id:	662867-007	662867-008	662867-009	662867-010	662867-011	662867-012
	Field Id:	ARB2-001 1'bgs	ARB2-001 2'bgs	ARB2-001 4'bgs	ARB2-001 10'bgs	ARB2-001 15'bgs	ARB2-001 20'bgs
	Depth:	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 08:06	05.27.2020 08:08	05.27.2020 08:09	05.27.2020 08:10	05.27.2020 08:12	05.27.2020 08:13
Inorganic Anions by EPA 300	Extracted:	05.29.2020 12:35	05.29.2020 12:35	05.29.2020 12:35	05.29.2020 12:35	05.29.2020 12:35	05.29.2020 12:35
	Analyzed:	05.31.2020 16:22	05.31.2020 16:27	05.31.2020 16:32	05.31.2020 16:37	05.31.2020 16:42	05.31.2020 16:47
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3960 25.0	16.1 4.97	84.5 4.98	13.6 5.04	21.9 5.04	44.9 5.03

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John Builes
Project Manager



Certificate of Analysis Summary 662867

Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15

Report Date: 06.03.2020 08:19

Project Manager: John Builes

<i>Analysis Requested</i>	<i>Lab Id:</i>	662867-013	662867-014	662867-015	662867-016	662867-017	662867-018
	<i>Field Id:</i>	ARB3-001 1'bgs	ARB3-001 2'bgs	ARB3-001 4'bgs	ARB3-001 10'bgs	ARB3-001 15'bgs	ARB3-001 20'bgs
	<i>Depth:</i>	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	05.27.2020 08:20	05.27.2020 08:30	05.27.2020 08:31	05.27.2020 08:32	05.27.2020 08:35	05.27.2020 08:36
Inorganic Anions by EPA 300	<i>Extracted:</i>	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45
	<i>Analyzed:</i>	05.29.2020 13:27	05.29.2020 13:33	05.29.2020 13:40	05.29.2020 13:46	05.29.2020 14:06	05.29.2020 14:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		5260 50.4	1920 24.9	2300 24.9	1980 24.9	1950 24.9	1810 25.0

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John Builes
Project Manager



Certificate of Analysis Summary 662867

Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15
Report Date: 06.03.2020 08:19
Project Manager: John Builes

<i>Analysis Requested</i>	<i>Lab Id:</i>	662867-019	662867-020	662867-021	662867-022	662867-023	662867-024
	<i>Field Id:</i>	ARB4-001 1'bgs	ARB4-001 2'bgs	ARB4-001 4'bgs	ARB4-001 10'bgs	ARB4-001 15'bgs	ARB4-001 20'bgs
	<i>Depth:</i>	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	05.27.2020 08:45	05.27.2020 08:52	05.27.2020 08:53	05.27.2020 08:54	05.27.2020 08:55	05.27.2020 08:56
Inorganic Anions by EPA 300	<i>Extracted:</i>	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45
	<i>Analyzed:</i>	05.29.2020 14:20	05.29.2020 13:07	05.29.2020 14:26	05.29.2020 14:33	05.29.2020 14:40	05.29.2020 15:00
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3160 24.8	404 4.95	206 4.98	10.7 4.98	3.61 J 5.00	4.85 J 4.99

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Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15

Report Date: 06.03.2020 08:19

Project Manager: John Builes

Analysis Requested	Lab Id:	662867-025	662867-026	662867-027	662867-028	662867-029	662867-030
	Field Id:	ARB5-001 1'bgs	ARB5-001 2'bgs	ARB5-001 4'bgs	ARB5-001 10'bgs	ARB5-001 15'bgs	ARB5-001 20'bgs
	Depth:	1- ft	1- ft	4- ft	10- ft	15- ft	20- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 09:10	05.27.2020 09:45	05.27.2020 09:46	05.27.2020 09:47	05.27.2020 09:48	05.27.2020 09:49
Inorganic Anions by EPA 300	Extracted:	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45
	Analyzed:	05.29.2020 15:06	05.29.2020 15:26	05.29.2020 15:33	05.29.2020 15:39	05.29.2020 15:46	05.29.2020 15:53
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		6620 50.0	594 4.97	14.7 4.97	6.37 4.98	6.89 4.98	4.61 J 4.98

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Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
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Date Received in Lab: Thu 05.28.2020 15:15

Report Date: 06.03.2020 08:19

Project Manager: John Builes

Analysis Requested	Lab Id:	662867-031	662867-032	662867-033	662867-034	662867-035	662867-036
	Field Id:	ARB6-001 1'bgs	ARB16001 2'bgs	ARB6-001 4'bgs	ARB6-001 10'bgs	ARB6-001 15'bgs	ARB6-001 20'bgs
	Depth:	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 09:58	05.27.2020 10:01	05.27.2020 10:02	05.27.2020 10:03	05.27.2020 10:04	05.27.2020 10:05
Inorganic Anions by EPA 300	Extracted:	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45
	Analyzed:	05.29.2020 15:59	05.29.2020 16:06	05.29.2020 16:46	05.29.2020 17:52	05.29.2020 17:59	05.29.2020 18:06
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2720 25.0	423 5.02	165 4.99	2.23 J 5.01	2.09 J 4.97	7.00 5.00

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Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15
Report Date: 06.03.2020 08:19
Project Manager: John Builes

Analysis Requested	Lab Id:	662867-037	662867-038	662867-039	662867-040	662867-041	662867-042
	Field Id:	ARB7-001 1'bgs	ARB7-001 2'bgs	ARB7-001 4'bgs	ARB7-001 10'bgs	ARB7-001 15'bgs	ARB7-001 20'bgs
	Depth:	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 10:12	05.27.2020 10:15	05.27.2020 10:17	05.27.2020 10:18	05.27.2020 10:20	05.27.2020 10:21
Inorganic Anions by EPA 300	Extracted:	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45
	Analyzed:	05.29.2020 18:12	05.29.2020 18:19	05.29.2020 18:39	05.29.2020 18:45	05.29.2020 19:05	05.29.2020 19:12
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2770 25.0	390 5.02	229 5.04	3.68 J 4.99	22.4 4.97	4.40 J 5.00

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Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15

Report Date: 06.03.2020 08:19

Project Manager: John Builes

Analysis Requested	Lab Id:	662867-043	662867-044	662867-045	662867-046	662867-047	662867-048
	Field Id:	HDP1-001 1'bgs	HDP1-001 2'bgs	HDP1-001 4'bgs	HDP1-001 10'bgs	HDP1-001 15'bgs	HDP1-001 20'bgs
	Depth:	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 10:33	05.27.2020 10:34	05.27.2020 10:36	05.27.2020 10:37	05.27.2020 10:38	05.27.2020 10:39
Inorganic Anions by EPA 300	Extracted:	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 12:45	05.29.2020 13:30
	Analyzed:	05.29.2020 19:19	05.29.2020 19:25	05.29.2020 19:32	05.29.2020 19:39	05.29.2020 19:45	05.31.2020 17:17
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		37.6 4.97	10.5 4.96	7.38 4.96	6.87 4.99	4.13 J 4.98	11.6 5.00

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Project Manager



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Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15

Report Date: 06.03.2020 08:19

Project Manager: John Builes

Analysis Requested	Lab Id:	662867-049	662867-050	662867-051	662867-052	662867-053	662867-054
	Field Id:	HDP2-001 1'bgs	HDP2-001 2'bgs	HDP2-001 4'bgs	HDP2-001 10'bgs	HDP2-001 15'bgs	HDP2-001 20'bgs
	Depth:	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 11:14	05.27.2020 11:16	05.27.2020 11:17	05.27.2020 11:18	05.27.2020 11:19	05.27.2020 11:20
Inorganic Anions by EPA 300	Extracted:	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30
	Analyzed:	05.31.2020 17:33	05.31.2020 17:38	05.31.2020 17:43	05.31.2020 17:48	05.31.2020 18:03	05.31.2020 18:08
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		55.9 4.98	16.5 4.96	13.8 4.99	11.7 5.01	9.49 4.98	10.3 5.00

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John Builes
Project Manager



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Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15
Report Date: 06.03.2020 08:19
Project Manager: John Builes

Analysis Requested	Lab Id:	662867-055	662867-056	662867-057	662867-058	662867-059	662867-060
	Field Id:	HDP3-001 1'bgs	HDP3-001 2'bgs	HDP3-001 4'bgs	HDP3-001 10'bgs	HDP3-001 15'bgs	HDP3-001 20'bgs
	Depth:	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 11:26	05.27.2020 11:27	05.27.2020 11:28	05.27.2020 11:29	05.27.2020 11:30	05.27.2020 11:31
Inorganic Anions by EPA 300	Extracted:	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30
	Analyzed:	05.31.2020 18:13	05.31.2020 18:18	05.31.2020 18:23	05.31.2020 18:28	05.31.2020 18:43	05.31.2020 18:48
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		34.2 4.99	152 4.96	314 4.99	499 4.97	354 4.99	330 5.05

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John Builes
Project Manager



Certificate of Analysis Summary 662867

Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15
Report Date: 06.03.2020 08:19
Project Manager: John Builes

Analysis Requested	Lab Id:	662867-061	662867-062	662867-063	662867-064	662867-065	662867-066
	Field Id:	HDP4-001 1'bgs	HDP4-001 2'bgs	HDP4-001 4'bgs	HDP4-001 10'bgs	HDP4-001 15'bgs	HDP4-001 20'bgs
	Depth:	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 11:37	05.27.2020 11:39	05.27.2020 11:40	05.27.2020 11:41	05.27.2020 11:42	05.27.2020 11:43
Inorganic Anions by EPA 300	Extracted:	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30	05.29.2020 13:30
	Analyzed:	05.31.2020 19:04	05.31.2020 19:09	05.31.2020 19:14	05.31.2020 19:19	05.31.2020 19:24	05.31.2020 19:29
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		85.1 5.04	21.8 4.96	10.0 4.98	9.35 4.95	8.99 5.04	10.9 5.04

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John Builes
Project Manager



Certificate of Analysis Summary 662867

Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15

Report Date: 06.03.2020 08:19

Project Manager: John Builes

<i>Analysis Requested</i>	<i>Lab Id:</i>	662867-067	662867-068	662867-069	662867-070	662867-071	662867-072
	<i>Field Id:</i>	HDP5-001 1'bgs	HDP5-001 2'bgs	HDP5-001 4'bgs	HDP5-001 10'bgs	HDP5-001 15'bgs	HDP5-001 20'bgs
	<i>Depth:</i>	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	05.27.2020 11:52	05.27.2020 11:53	05.27.2020 11:54	05.27.2020 11:55	05.27.2020 11:56	05.27.2020 11:57
Inorganic Anions by EPA 300	<i>Extracted:</i>	05.29.2020 13:30	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00
	<i>Analyzed:</i>	05.31.2020 19:34	05.29.2020 19:40	05.29.2020 19:56	05.29.2020 20:01	05.29.2020 20:06	05.29.2020 20:11
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		18.7 4.97	12.9 4.98	12.6 5.01	12.0 4.99	11.2 5.02	9.35 5.04

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John Builes
Project Manager



Certificate of Analysis Summary 662867

Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15
Report Date: 06.03.2020 08:19
Project Manager: John Builes

Analysis Requested	Lab Id:	662867-073	662867-074	662867-075	662867-076	662867-077	662867-078
	Field Id:	HDP6-001 1'bgs	HDP6-001 2'bgs	HDP6-001 4'bgs	HDP6-001 10'bgs	HDP6-001 15'bgs	HDP6-001 20'bgs
	Depth:	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 12:08	05.27.2020 12:09	05.27.2020 12:11	05.27.2020 12:12	05.27.2020 12:13	05.27.2020 12:14
Inorganic Anions by EPA 300	Extracted:	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00
	Analyzed:	05.29.2020 20:26	05.29.2020 20:31	05.29.2020 20:36	05.29.2020 20:41	05.29.2020 20:46	05.29.2020 20:51
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		43.3 4.99	23.5 4.98	18.5 4.98	14.0 4.97	13.3 4.99	13.3 4.99

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John Builes
Project Manager



Certificate of Analysis Summary 662867

Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15
Report Date: 06.03.2020 08:19
Project Manager: John Builes

Analysis Requested	Lab Id:	662867-079	662867-080	662867-081	662867-082	662867-083	662867-084
	Field Id:	HDP7-001 1'bgs	HDP7-001 2'bgs	HDP7-001 4'bgs	HDP7-001 10'bgs	HDP7-001 15'bgs	HDP7-001 20'bgs
	Depth:	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 12:34	05.27.2020 12:35	05.27.2020 12:36	05.27.2020 12:37	05.27.2020 12:38	05.27.2020 12:39
Inorganic Anions by EPA 300	Extracted:	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00
	Analyzed:	05.29.2020 21:06	05.29.2020 21:11	05.29.2020 21:27	05.29.2020 21:32	05.29.2020 21:37	05.29.2020 21:42
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		21.7 4.99	23.3 4.96	12.5 4.95	12.2 4.95	14.6 4.98	25.5 4.99

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John Builes
Project Manager



Certificate of Analysis Summary 662867

Sport Environmental Services, LLC, Midland, TX

Project Name: Catena Lease-S Vac 27 #003

Project Id: 8015
Contact: Debi Moore
Project Location:

Date Received in Lab: Thu 05.28.2020 15:15

Report Date: 06.03.2020 08:19

Project Manager: John Builes

Analysis Requested	Lab Id:	662867-085	662867-086	662867-087	662867-088	662867-089	662867-090
	Field Id:	HDP8-001 1'bgs	HDP8-001 2'bgs	ARB8-001 4'bgs	HDP8-001 10'bgs	HDP8-001 15'bgs	HDP8-001 20'bgs
	Depth:	1- ft	2- ft	4- ft	10- ft	15- ft	20- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 12:50	05.27.2020 12:52	05.27.2020 12:53	05.27.2020 12:54	05.27.2020 12:55	05.27.2020 12:56
Inorganic Anions by EPA 300	Extracted:	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 14:00	05.29.2020 15:20	05.29.2020 15:20	05.29.2020 15:20
	Analyzed:	05.29.2020 21:47	05.29.2020 21:52	05.29.2020 21:57	05.29.2020 21:51	05.29.2020 21:58	05.29.2020 22:18
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		99.8 49.7	86.1 24.9	222 4.97	1430 24.8	689 X 5.00	80.2 5.05

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John Builes
Project Manager



Analytical Report 662867

for

Sport Environmental Services, LLC

Project Manager: Debi Moore

Catena Lease-S Vac 27 #003

8015

06.03.2020

Collected By: Client



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

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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.03.2020

Project Manager: **Debi Moore**
Sport Environmental Services, LLC
502 North Big Spring Street
Midland, TX 79701

Reference: XENCO Report No(s): **662867**
Catena Lease-S Vac 27 #003
Project Address:

Debi Moore:

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) 662867. 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. 662867 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,

A handwritten signature in black ink, appearing to read 'JB', is written over a light blue rectangular background.

John Builes
Project Manager

A Small Business and Minority Company

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Sample Cross Reference 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
ARB1-001 1'bgs	S	05.27.2020 07:25	1 ft	662867-001
ARB1-001 2'bgs	S	05.27.2020 07:52	2 ft	662867-002
ARB1-001 4'bgs	S	05.27.2020 07:54	4 ft	662867-003
ARB1-001 10'bgs	S	05.27.2020 07:55	10 ft	662867-004
ARB1-001 15'bgs	S	05.27.2020 07:56	15 ft	662867-005
ARB1-001 20'bgs	S	05.27.2020 07:57	20 ft	662867-006
ARB2-001 1'bgs	S	05.27.2020 08:06	1 ft	662867-007
ARB2-001 2'bgs	S	05.27.2020 08:08	2 ft	662867-008
ARB2-001 4'bgs	S	05.27.2020 08:09	4 ft	662867-009
ARB2-001 10'bgs	S	05.27.2020 08:10	10 ft	662867-010
ARB2-001 15'bgs	S	05.27.2020 08:12	15 ft	662867-011
ARB2-001 20'bgs	S	05.27.2020 08:13	20 ft	662867-012
ARB3-001 1'bgs	S	05.27.2020 08:20	1 ft	662867-013
ARB3-001 2'bgs	S	05.27.2020 08:30	2 ft	662867-014
ARB3-001 4'bgs	S	05.27.2020 08:31	4 ft	662867-015
ARB3-001 10'bgs	S	05.27.2020 08:32	10 ft	662867-016
ARB3-001 15'bgs	S	05.27.2020 08:35	15 ft	662867-017
ARB3-001 20'bgs	S	05.27.2020 08:36	20 ft	662867-018
ARB4-001 1'bgs	S	05.27.2020 08:45	1 ft	662867-019
ARB4-001 2'bgs	S	05.27.2020 08:52	2 ft	662867-020
ARB4-001 4'bgs	S	05.27.2020 08:53	4 ft	662867-021
ARB4-001 10'bgs	S	05.27.2020 08:54	10 ft	662867-022
ARB4-001 15'bgs	S	05.27.2020 08:55	15 ft	662867-023
ARB4-001 20'bgs	S	05.27.2020 08:56	20 ft	662867-024
ARB5-001 1'bgs	S	05.27.2020 09:10	1 ft	662867-025
ARB5-001 2'bgs	S	05.27.2020 09:45	1 ft	662867-026
ARB5-001 4'bgs	S	05.27.2020 09:46	4 ft	662867-027
ARB5-001 10'bgs	S	05.27.2020 09:47	10 ft	662867-028
ARB5-001 15'bgs	S	05.27.2020 09:48	15 ft	662867-029
ARB5-001 20'bgs	S	05.27.2020 09:49	20 ft	662867-030
ARB6-001 1'bgs	S	05.27.2020 09:58	1 ft	662867-031
ARB16001 2'bgs	S	05.27.2020 10:01	2 ft	662867-032
ARB6-001 4'bgs	S	05.27.2020 10:02	4 ft	662867-033
ARB6-001 10'bgs	S	05.27.2020 10:03	10 ft	662867-034
ARB6-001 15'bgs	S	05.27.2020 10:04	15 ft	662867-035
ARB6-001 20'bgs	S	05.27.2020 10:05	20 ft	662867-036
ARB7-001 1'bgs	S	05.27.2020 10:12	1 ft	662867-037
ARB7-001 2'bgs	S	05.27.2020 10:15	2 ft	662867-038
ARB7-001 4'bgs	S	05.27.2020 10:17	4 ft	662867-039
ARB7-001 10'bgs	S	05.27.2020 10:18	10 ft	662867-040
ARB7-001 15'bgs	S	05.27.2020 10:20	15 ft	662867-041
ARB7-001 20'bgs	S	05.27.2020 10:21	20 ft	662867-042
HDP1-001 1'bgs	S	05.27.2020 10:33	1 ft	662867-043



Sample Cross Reference 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

HDP1-001 2'bgs	S	05.27.2020 10:34	2 ft	662867-044
HDP1-001 4'bgs	S	05.27.2020 10:36	4 ft	662867-045
HDP1-001 10'bgs	S	05.27.2020 10:37	10 ft	662867-046
HDP1-001 15'bgs	S	05.27.2020 10:38	15 ft	662867-047
HDP1-001 20'bgs	S	05.27.2020 10:39	20 ft	662867-048
HDP2-001 1'bgs	S	05.27.2020 11:14	1 ft	662867-049
HDP2-001 2'bgs	S	05.27.2020 11:16	2 ft	662867-050
HDP2-001 4'bgs	S	05.27.2020 11:17	4 ft	662867-051
HDP2-001 10'bgs	S	05.27.2020 11:18	10 ft	662867-052
HDP2-001 15'bgs	S	05.27.2020 11:19	15 ft	662867-053
HDP2-001 20'bgs	S	05.27.2020 11:20	20 ft	662867-054
HDP3-001 1'bgs	S	05.27.2020 11:26	1 ft	662867-055
HDP3-001 2'bgs	S	05.27.2020 11:27	2 ft	662867-056
HDP3-001 4'bgs	S	05.27.2020 11:28	4 ft	662867-057
HDP3-001 10'bgs	S	05.27.2020 11:29	10 ft	662867-058
HDP3-001 15'bgs	S	05.27.2020 11:30	15 ft	662867-059
HDP3-001 20'bgs	S	05.27.2020 11:31	20 ft	662867-060
HDP4-001 1'bgs	S	05.27.2020 11:37	1 ft	662867-061
HDP4-001 2'bgs	S	05.27.2020 11:39	2 ft	662867-062
HDP4-001 4'bgs	S	05.27.2020 11:40	4 ft	662867-063
HDP4-001 10'bgs	S	05.27.2020 11:41	10 ft	662867-064
HDP4-001 15'bgs	S	05.27.2020 11:42	15 ft	662867-065
HDP4-001 20'bgs	S	05.27.2020 11:43	20 ft	662867-066
HDP5-001 1'bgs	S	05.27.2020 11:52	1 ft	662867-067
HDP5-001 2'bgs	S	05.27.2020 11:53	2 ft	662867-068
HDP5-001 4'bgs	S	05.27.2020 11:54	4 ft	662867-069
HDP5-001 10'bgs	S	05.27.2020 11:55	10 ft	662867-070
HDP5-001 15'bgs	S	05.27.2020 11:56	15 ft	662867-071
HDP5-001 20'bgs	S	05.27.2020 11:57	20 ft	662867-072
HDP6-001 1'bgs	S	05.27.2020 12:08	1 ft	662867-073
HDP6-001 2'bgs	S	05.27.2020 12:09	2 ft	662867-074
HDP6-001 4'bgs	S	05.27.2020 12:11	4 ft	662867-075
HDP6-001 10'bgs	S	05.27.2020 12:12	10 ft	662867-076
HDP6-001 15'bgs	S	05.27.2020 12:13	15 ft	662867-077
HDP6-001 20'bgs	S	05.27.2020 12:14	20 ft	662867-078
HDP7-001 1'bgs	S	05.27.2020 12:34	1 ft	662867-079
HDP7-001 2'bgs	S	05.27.2020 12:35	2 ft	662867-080
HDP7-001 4'bgs	S	05.27.2020 12:36	4 ft	662867-081
HDP7-001 10'bgs	S	05.27.2020 12:37	10 ft	662867-082
HDP7-001 15'bgs	S	05.27.2020 12:38	15 ft	662867-083
HDP7-001 20'bgs	S	05.27.2020 12:39	20 ft	662867-084
HDP8-001 1'bgs	S	05.27.2020 12:50	1 ft	662867-085
HDP8-001 2'bgs	S	05.27.2020 12:52	2 ft	662867-086
ARB8-001 4'bgs	S	05.27.2020 12:53	4 ft	662867-087



Sample Cross Reference 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

HDP8-001 10'bgs	S	05.27.2020 12:54	10 ft	662867-088
HDP8-001 15'bgs	S	05.27.2020 12:55	15 ft	662867-089
HDP8-001 20'bgs	S	05.27.2020 12:56	20 ft	662867-090



CASE NARRATIVE

Client Name: Sport Environmental Services, LLC

Project Name: Catena Lease-S Vac 27 #003

Project ID: 8015
Work Order Number(s): 662867

Report Date: 06.03.2020
Date Received: 05.28.2020

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

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3127477 Inorganic Anions by EPA 300

Lab Sample ID 662973-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 662867-088, -089, -090.

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



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB1-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-001

Date Collected: 05.27.2020 07:25

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2270	24.9	4.27	mg/kg	05.31.2020 15:31		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB1-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-002

Date Collected: 05.27.2020 07:52

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	250	4.99	0.857	mg/kg	05.31.2020 15:36		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB1-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-003

Date Collected: 05.27.2020 07:54

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	47.2	5.01	0.860	mg/kg	05.31.2020 15:41		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB1-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-004

Date Collected: 05.27.2020 07:55

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.1	4.96	0.852	mg/kg	05.31.2020 15:56		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB1-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-005

Date Collected: 05.27.2020 07:56

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.0	5.04	0.865	mg/kg	05.31.2020 16:01		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB1-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-006

Date Collected: 05.27.2020 07:57

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.0	5.05	0.867	mg/kg	05.31.2020 16:17		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB2-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-007

Date Collected: 05.27.2020 08:06

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3960	25.0	4.28	mg/kg	05.31.2020 16:22		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB2-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-008

Date Collected: 05.27.2020 08:08

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.1	4.97	0.853	mg/kg	05.31.2020 16:27		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB2-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-009

Date Collected: 05.27.2020 08:09

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	84.5	4.98	0.855	mg/kg	05.31.2020 16:32		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB2-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-010

Date Collected: 05.27.2020 08:10

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.6	5.04	0.865	mg/kg	05.31.2020 16:37		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB2-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-011

Date Collected: 05.27.2020 08:12

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.9	5.04	0.865	mg/kg	05.31.2020 16:42		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB2-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-012

Date Collected: 05.27.2020 08:13

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:35

Basis: Wet Weight

Seq Number: 3127471

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.9	5.03	0.864	mg/kg	05.31.2020 16:47		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB3-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-013

Date Collected: 05.27.2020 08:20

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5260	50.4	8.65	mg/kg	05.29.2020 13:27		10



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB3-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-014

Date Collected: 05.27.2020 08:30

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1920	24.9	4.27	mg/kg	05.29.2020 13:33		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB3-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-015

Date Collected: 05.27.2020 08:31

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2300	24.9	4.27	mg/kg	05.29.2020 13:40		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB3-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-016

Date Collected: 05.27.2020 08:32

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1980	24.9	4.27	mg/kg	05.29.2020 13:46		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB3-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-017

Date Collected: 05.27.2020 08:35

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1950	24.9	4.27	mg/kg	05.29.2020 14:06		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB3-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-018

Date Collected: 05.27.2020 08:36

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1810	25.0	4.29	mg/kg	05.29.2020 14:13		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB4-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-019

Date Collected: 05.27.2020 08:45

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3160	24.8	4.26	mg/kg	05.29.2020 14:20		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB4-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-020

Date Collected: 05.27.2020 08:52

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	404	4.95	0.850	mg/kg	05.29.2020 13:07		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB4-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-021

Date Collected: 05.27.2020 08:53

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	206	4.98	0.855	mg/kg	05.29.2020 14:26		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB4-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-022

Date Collected: 05.27.2020 08:54

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.7	4.98	0.855	mg/kg	05.29.2020 14:33		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB4-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-023

Date Collected: 05.27.2020 08:55

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.61	5.00	0.858	mg/kg	05.29.2020 14:40	J	1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB4-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-024

Date Collected: 05.27.2020 08:56

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4.85	4.99	0.857	mg/kg	05.29.2020 15:00	J	1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB5-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-025

Date Collected: 05.27.2020 09:10

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6620	50.0	8.58	mg/kg	05.29.2020 15:06		10



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB5-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-026

Date Collected: 05.27.2020 09:45

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	594	4.97	0.853	mg/kg	05.29.2020 15:26		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB5-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-027

Date Collected: 05.27.2020 09:46

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.7	4.97	0.853	mg/kg	05.29.2020 15:33		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB5-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-028

Date Collected: 05.27.2020 09:47

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.37	4.98	0.855	mg/kg	05.29.2020 15:39		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB5-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-029

Date Collected: 05.27.2020 09:48

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.89	4.98	0.855	mg/kg	05.29.2020 15:46		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB5-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-030

Date Collected: 05.27.2020 09:49

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4.61	4.98	0.855	mg/kg	05.29.2020 15:53	J	1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB6-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-031

Date Collected: 05.27.2020 09:58

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2720	25.0	4.28	mg/kg	05.29.2020 15:59		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB16001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-032

Date Collected: 05.27.2020 10:01

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127472

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	423	5.02	0.862	mg/kg	05.29.2020 16:06		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB6-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-033

Date Collected: 05.27.2020 10:02

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	165	4.99	0.857	mg/kg	05.29.2020 16:46		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB6-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-034

Date Collected: 05.27.2020 10:03

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.23	5.01	0.860	mg/kg	05.29.2020 17:52	J	1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB6-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-035

Date Collected: 05.27.2020 10:04

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.09	4.97	0.853	mg/kg	05.29.2020 17:59	J	1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB6-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-036

Date Collected: 05.27.2020 10:05

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.00	5.00	0.858	mg/kg	05.29.2020 18:06		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB7-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-037

Date Collected: 05.27.2020 10:12

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2770	25.0	4.29	mg/kg	05.29.2020 18:12		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB7-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-038

Date Collected: 05.27.2020 10:15

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	390	5.02	0.862	mg/kg	05.29.2020 18:19		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB7-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-039

Date Collected: 05.27.2020 10:17

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	229	5.04	0.865	mg/kg	05.29.2020 18:39		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB7-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-040

Date Collected: 05.27.2020 10:18

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.68	4.99	0.857	mg/kg	05.29.2020 18:45	J	1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB7-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-041

Date Collected: 05.27.2020 10:20

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.4	4.97	0.853	mg/kg	05.29.2020 19:05		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB7-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-042

Date Collected: 05.27.2020 10:21

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4.40	5.00	0.858	mg/kg	05.29.2020 19:12	J	1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP1-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-043

Date Collected: 05.27.2020 10:33

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	37.6	4.97	0.853	mg/kg	05.29.2020 19:19		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP1-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-044

Date Collected: 05.27.2020 10:34

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.5	4.96	0.852	mg/kg	05.29.2020 19:25		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP1-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-045

Date Collected: 05.27.2020 10:36

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.38	4.96	0.852	mg/kg	05.29.2020 19:32		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP1-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-046

Date Collected: 05.27.2020 10:37

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.87	4.99	0.857	mg/kg	05.29.2020 19:39		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP1-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-047

Date Collected: 05.27.2020 10:38

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 12:45

Basis: Wet Weight

Seq Number: 3127474

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4.13	4.98	0.855	mg/kg	05.29.2020 19:45	J	1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP1-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-048

Date Collected: 05.27.2020 10:39

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.6	5.00	0.858	mg/kg	05.31.2020 17:17		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP2-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-049

Date Collected: 05.27.2020 11:14

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	55.9	4.98	0.855	mg/kg	05.31.2020 17:33		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP2-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-050

Date Collected: 05.27.2020 11:16

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.5	4.96	0.852	mg/kg	05.31.2020 17:38		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP2-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-051

Date Collected: 05.27.2020 11:17

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.8	4.99	0.857	mg/kg	05.31.2020 17:43		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP2-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-052

Date Collected: 05.27.2020 11:18

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.7	5.01	0.860	mg/kg	05.31.2020 17:48		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP2-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-053

Date Collected: 05.27.2020 11:19

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.49	4.98	0.855	mg/kg	05.31.2020 18:03		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP2-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-054

Date Collected: 05.27.2020 11:20

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.3	5.00	0.858	mg/kg	05.31.2020 18:08		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP3-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-055

Date Collected: 05.27.2020 11:26

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.2	4.99	0.857	mg/kg	05.31.2020 18:13		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP3-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-056

Date Collected: 05.27.2020 11:27

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	152	4.96	0.852	mg/kg	05.31.2020 18:18		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP3-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-057

Date Collected: 05.27.2020 11:28

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	314	4.99	0.857	mg/kg	05.31.2020 18:23		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP3-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-058

Date Collected: 05.27.2020 11:29

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	499	4.97	0.853	mg/kg	05.31.2020 18:28		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP3-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-059

Date Collected: 05.27.2020 11:30

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	354	4.99	0.857	mg/kg	05.31.2020 18:43		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP3-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-060

Date Collected: 05.27.2020 11:31

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	330	5.05	0.867	mg/kg	05.31.2020 18:48		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP4-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-061

Date Collected: 05.27.2020 11:37

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	85.1	5.04	0.865	mg/kg	05.31.2020 19:04		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP4-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-062

Date Collected: 05.27.2020 11:39

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.8	4.96	0.852	mg/kg	05.31.2020 19:09		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP4-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-063

Date Collected: 05.27.2020 11:40

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.0	4.98	0.855	mg/kg	05.31.2020 19:14		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP4-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-064

Date Collected: 05.27.2020 11:41

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.35	4.95	0.850	mg/kg	05.31.2020 19:19		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP4-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-065

Date Collected: 05.27.2020 11:42

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.99	5.04	0.865	mg/kg	05.31.2020 19:24		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP4-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-066

Date Collected: 05.27.2020 11:43

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.9	5.04	0.865	mg/kg	05.31.2020 19:29		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP5-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-067

Date Collected: 05.27.2020 11:52

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 13:30

Basis: Wet Weight

Seq Number: 3127475

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.7	4.97	0.853	mg/kg	05.31.2020 19:34		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP5-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-068

Date Collected: 05.27.2020 11:53

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.9	4.98	0.855	mg/kg	05.29.2020 19:40		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP5-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-069

Date Collected: 05.27.2020 11:54

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.6	5.01	0.860	mg/kg	05.29.2020 19:56		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP5-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-070

Date Collected: 05.27.2020 11:55

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.0	4.99	0.857	mg/kg	05.29.2020 20:01		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP5-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-071

Date Collected: 05.27.2020 11:56

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.2	5.02	0.862	mg/kg	05.29.2020 20:06		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP5-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-072

Date Collected: 05.27.2020 11:57

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.35	5.04	0.865	mg/kg	05.29.2020 20:11		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP6-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-073

Date Collected: 05.27.2020 12:08

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	43.3	4.99	0.857	mg/kg	05.29.2020 20:26		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP6-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-074

Date Collected: 05.27.2020 12:09

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.5	4.98	0.855	mg/kg	05.29.2020 20:31		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP6-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-075

Date Collected: 05.27.2020 12:11

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.5	4.98	0.855	mg/kg	05.29.2020 20:36		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP6-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-076

Date Collected: 05.27.2020 12:12

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.0	4.97	0.853	mg/kg	05.29.2020 20:41		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP6-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-077

Date Collected: 05.27.2020 12:13

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.3	4.99	0.857	mg/kg	05.29.2020 20:46		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP6-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-078

Date Collected: 05.27.2020 12:14

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.3	4.99	0.857	mg/kg	05.29.2020 20:51		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP7-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-079

Date Collected: 05.27.2020 12:34

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.7	4.99	0.857	mg/kg	05.29.2020 21:06		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP7-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-080

Date Collected: 05.27.2020 12:35

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.3	4.96	0.852	mg/kg	05.29.2020 21:11		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP7-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-081

Date Collected: 05.27.2020 12:36

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.5	4.95	0.850	mg/kg	05.29.2020 21:27		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP7-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-082

Date Collected: 05.27.2020 12:37

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.2	4.95	0.850	mg/kg	05.29.2020 21:32		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP7-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-083

Date Collected: 05.27.2020 12:38

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.6	4.98	0.855	mg/kg	05.29.2020 21:37		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP7-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-084

Date Collected: 05.27.2020 12:39

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.5	4.99	0.857	mg/kg	05.29.2020 21:42		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP8-001 1'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-085

Date Collected: 05.27.2020 12:50

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	99.8	49.7	8.53	mg/kg	05.29.2020 21:47		10



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP8-001 2'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-086

Date Collected: 05.27.2020 12:52

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	86.1	24.9	4.27	mg/kg	05.29.2020 21:52		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **ARB8-001 4'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-087

Date Collected: 05.27.2020 12:53

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 14:00

Basis: Wet Weight

Seq Number: 3127476

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	222	4.97	0.853	mg/kg	05.29.2020 21:57		1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP8-001 10'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-088

Date Collected: 05.27.2020 12:54

Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 15:20

Basis: Wet Weight

Seq Number: 3127477

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1430	24.8	4.26	mg/kg	05.29.2020 21:51		5



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP8-001 15'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-089

Date Collected: 05.27.2020 12:55

Sample Depth: 15 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 15:20

Basis: Wet Weight

Seq Number: 3127477

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	689	5.00	0.858	mg/kg	05.29.2020 21:58	X	1



Certificate of Analytical Results 662867

Sport Environmental Services, LLC, Midland, TX

Catena Lease-S Vac 27 #003

Sample Id: **HDP8-001 20'bgs**

Matrix: Soil

Date Received: 05.28.2020 15:15

Lab Sample Id: 662867-090

Date Collected: 05.27.2020 12:56

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 05.29.2020 15:20

Basis: Wet Weight

Seq Number: 3127477

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	80.2	5.05	0.867	mg/kg	05.29.2020 22:18		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



Sport Environmental Services, LLC

Catena Lease-S Vac 27 #003

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127471

Matrix: Solid

Prep Method: E300P

Date Prep: 05.29.2020

MB Sample Id: 7704380-1-BLK

LCS Sample Id: 7704380-1-BKS

LCSD Sample Id: 7704380-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	237	95	248	99	90-110	5	20	mg/kg	05.31.2020 14:20	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127472

Matrix: Solid

Prep Method: E300P

Date Prep: 05.29.2020

MB Sample Id: 7704381-1-BLK

LCS Sample Id: 7704381-1-BKS

LCSD Sample Id: 7704381-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	246	98	247	99	90-110	0	20	mg/kg	05.29.2020 12:53	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127474

Matrix: Solid

Prep Method: E300P

Date Prep: 05.29.2020

MB Sample Id: 7704386-1-BLK

LCS Sample Id: 7704386-1-BKS

LCSD Sample Id: 7704386-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	248	99	250	100	90-110	1	20	mg/kg	05.29.2020 16:33	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127475

Matrix: Solid

Prep Method: E300P

Date Prep: 05.29.2020

MB Sample Id: 7704387-1-BLK

LCS Sample Id: 7704387-1-BKS

LCSD Sample Id: 7704387-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	241	96	243	97	90-110	1	20	mg/kg	05.31.2020 17:07	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127476

Matrix: Solid

Prep Method: E300P

Date Prep: 05.29.2020

MB Sample Id: 7704388-1-BLK

LCS Sample Id: 7704388-1-BKS

LCSD Sample Id: 7704388-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	257	103	257	103	90-110	0	20	mg/kg	05.29.2020 19:30	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127477

Matrix: Solid

Prep Method: E300P

Date Prep: 05.29.2020

MB Sample Id: 7704392-1-BLK

LCS Sample Id: 7704392-1-BKS

LCSD Sample Id: 7704392-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	248	99	248	99	90-110	0	20	mg/kg	05.29.2020 20:12	

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



QC Summary 662867

Sport Environmental Services, LLC Catena Lease-S Vac 27 #003

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127471

Parent Sample Id: 662739-023

Matrix: Soil

MS Sample Id: 662739-023 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662739-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	32.6	248	269	95	282	101	90-110	5	20	mg/kg	05.31.2020 14:35	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127471

Parent Sample Id: 662867-003

Matrix: Soil

MS Sample Id: 662867-003 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662867-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	47.2	251	290	97	301	101	90-110	4	20	mg/kg	05.31.2020 15:46	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127472

Parent Sample Id: 662867-020

Matrix: Soil

MS Sample Id: 662867-020 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662867-020 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	404	248	638	94	635	93	90-110	0	20	mg/kg	05.29.2020 13:13	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127472

Parent Sample Id: 662867-023

Matrix: Soil

MS Sample Id: 662867-023 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662867-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3.61	250	257	101	257	101	90-110	0	20	mg/kg	05.29.2020 14:46	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127474

Parent Sample Id: 662867-033

Matrix: Soil

MS Sample Id: 662867-033 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662867-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	165	250	425	104	415	100	90-110	2	20	mg/kg	05.29.2020 16:52	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127474

Parent Sample Id: 662867-038

Matrix: Soil

MS Sample Id: 662867-038 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662867-038 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	390	251	634	97	634	97	90-110	0	20	mg/kg	05.29.2020 18:25	

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



QC Summary 662867

Sport Environmental Services, LLC Catena Lease-S Vac 27 #003

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127475

Parent Sample Id: 662867-048

Matrix: Soil

MS Sample Id: 662867-048 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662867-048 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11.6	250	254	97	262	100	90-110	3	20	mg/kg	05.31.2020 17:22	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127475

Parent Sample Id: 662867-058

Matrix: Soil

MS Sample Id: 662867-058 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662867-058 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	499	249	736	95	750	101	90-110	2	20	mg/kg	05.31.2020 18:33	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127476

Parent Sample Id: 662867-068

Matrix: Soil

MS Sample Id: 662867-068 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662867-068 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.9	249	264	101	265	101	90-110	0	20	mg/kg	05.29.2020 19:45	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127476

Parent Sample Id: 662867-078

Matrix: Soil

MS Sample Id: 662867-078 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662867-078 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.3	250	267	101	263	100	90-110	2	20	mg/kg	05.29.2020 20:56	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127477

Parent Sample Id: 662867-089

Matrix: Soil

MS Sample Id: 662867-089 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662867-089 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	689	250	915	90	910	88	90-110	1	20	mg/kg	05.29.2020 22:05	X

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3127477

Parent Sample Id: 662973-001

Matrix: Soil

MS Sample Id: 662973-001 S

Prep Method: E300P

Date Prep: 05.29.2020

MSD Sample Id: 662973-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	798	250	1030	93	1020	89	90-110	1	20	mg/kg	05.29.2020 20:32	X

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

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
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Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813)
Hobbs, NM (575-392-7550)

Chain of Custody

Work Order No.:

Page 2 of 8
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Company Name:	Sport Environmental	Company Name:	
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City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	432-683-1100	Email:	debi@sportenv.com, cianna@sportenv.com, client@sportenv.com, dudley@sportenv.com

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

Project Name:	Catena Lease - S Vac 27 #003	Turn Around
Project Number:		Routine ☐
P.O. Number:		Rush:
Sampler's Name:	Clint Elliott	Due Date:

SAMPLE RECEIPT	Temp Blank:	Yes	No	Thermometer ID	Wet Ice:	(Yes)	No
Temperature (°C):	19.1						
Received intact:	yes	No					
Cooler Custody Seals:	Yes	No	N/A		Correction Factor:	-0.3	
Sample Custody Seals:	Yes	No	N/A		Total Containers:		

[illegible][illegible]

Total	200.7 / 6010		200.8 / 6020:	
	8RCRA	13PPM	Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010:	8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 	Ivan C. Moore	5-21-2010 4pm	2 		5-26-10 3:15pm
3			4		
5			6		



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)

Chain of Custody

Work Order No:

10029876
we22un

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Page 3 of 8

Project Manager:	Debi Moore	Bill to: (if different)	
Company Name:	Sport Environmental	Company Name:	
Address:	502 N. Big Spring	Address:	
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	432-683-1100	Email:	debi@sportenv.com, clint@sportenv.com, dudley@sportenv.com

Work Order Comments	
Program: ☐ PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

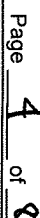
Project Name:	Catena Lease - S Vac 27 #003	Turn Around		ANALYSIS REQUEST	Work Order Notes
Project Number:		Routine ☐			
P.O. Number:		Rush:			
Sampler's Name:	Clint Elliott	Due Date:			
SAMPLE RECEIPT	Temp Blank: ☒ Yes ☒ No	Wet Ice: ☒ Yes ☒ No			
Temperature (°C):	19.11	Thermometer ID			
Received Inact:	Yes	No			
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:	
Sample Custody Seals:	Yes	No	N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides	TAT starts the day received by the lab, if received by 4:30pm	Sample Comments
ARB5-001 @ 1' bgs	S	5-27-20	0910	1'	1	X		
ARB5-001 @ 2' bgs	S		0945	2'	1	X		
ARB5-001 @ 4' bgs	S		0946	4'	1	X		
ARB5-001 @ 10' bgs	S		0947	10'	1	X		
ARB5-001 @ 15' bgs	S		0948	15'	1	X		
ARB5-001 @ 20' bgs	S		0949	20'	1	X		
ARB6-001 @ 1' bgs	S		0958	1'	1	X		
ARB6-001 @ 2' bgs	S		1001	2'	1	X		
ARB6-001 @ 4' bgs	S		1002	4'	1	X		
ARB6-001 @ 10' bgs	S		1003	10'	1	X		
ARB6-001 @ 15' bgs	S		1004	15'	1	X		
ARB6-001 @ 20' bgs	S		1005	20'	1	X		

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010. 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	Debi Moore	5-27-20 6pm		Debi Moore	5-28-20 3:15pm



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

EST					Work Order Notes
					TAT starts the day received by the lab, if received by 4:30pm

[illegible]

1631 / 245.1 / 7470 / 7471 : Hg

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Received by: (Signature)	Date/Time
<i>[Signature]</i>	5-28-20 3:15pm



Chain of Custody

Work Order No:

102207

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)

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Project Manager:	Debi Moore	Bill to: (if different)	
Company Name:	Sport Environmental	Company Name:	
Address:	502 N. Big Spring	Address:	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone:	432-683-1100	Email:	deb@sportenv.com, cianna@sportenv.com, cliff@sportenv.com, dudley@sportenv.com

Work Order Comments	
Program: ☐ UST/ST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level: ☐ I ☐ II ☐ III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: ☐ EDD ☐ ADAPT ☐ Other:	

Project Name:	Catena Lease - S Vac 27 #003	Turn Around	☐ Routine ☐ Rush:
Project Number:			
P.O. Number:			
Sampler's Name:	Cliff Elliott	Due Date:	

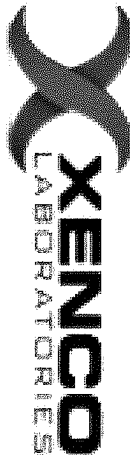
SAMPLE RECEIPT	
Temperature (°C):	19.1
Received In tact:	Yes No
Cooler Custody Seals:	Yes No N/A
Sample Custody Seals:	Yes No N/A
	Correction Factor:
	Total Containers:

Sample Identification			Matrix	Date Sampled	Time Sampled	Depth	Number	Chloride												Sample Comments
HDP2-001 @ 1' bgs			S	5-27-20	1114	1'	1	X												
HDP2-001 @ 2' bgs			S		1116	2'	1	X												
HDP2-001 @ 4' bgs			S		1117	4'	1	X												
HDP2-001 @ 10' bgs			S		1118	10'	1	X												
HDP2-001 @ 15' bgs			S		1119	15'	1	X												
HDP2-001 @ 20' bgs			S		1120 1130	20'	1	X												
HDP3-001 @ 1' bgs			S		1121	1'	1	X												
HDP3-001 @ 2' bgs			S		1127	2'	1	X												
HDP3-001 @ 4' bgs			S		1128	4'	1	X												
HDP3-001 @ 10' bgs			S		1129	10'	1	X												
HDP3-001 @ 15' bgs			S		1130	15'	1	X												
HDP3-001 @ 20' bgs			S		1131	20'	1	X												

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	Debi Moore	5-21-20 4pm		Debi Moore	5-22-20 3:15pm



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

Chain of Custody

Work Order No:

10023107

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Page 6 of 8

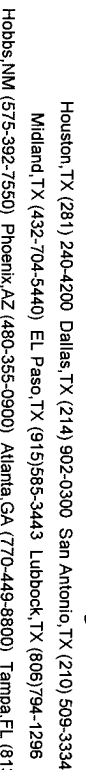
Project Manager:	Debi Moore	Bill to: (if different)	
Company Name:	Sport Environmental	Company Name:	
Address:	502 N. Big Spring	Address:	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone:	432-683-1100	Email:	debi@sportenv.com, cianna@sportenv.com, Clint@sportenv.com, dudley@sportenv.com
Project Name:	Catena Lease - S Vac 27 #003	Turn Around	
Project Number:		Routine ☐	
P.O. Number:		Rush:	
Sampler's Name:	Clint Elliott	Due Date:	
SAMPLE RECEIPT			
Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐
Received In/act:	Yes ☒ No ☐	Thermometer ID	
Cooler Custody Seals:	Yes ☐ No ☐ N/A ☐	Correction Factor:	
Sample Custody Seals:	Yes ☐ No ☐ N/A ☐	Total Containers:	
ANALYSIS REQUEST			
Work Order Comments			
Program: ☐ PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐			
State of Project:			
Reporting Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐			
Deliverables: EDD ☐ ADAPT ☐ Other: ☐			
Work Order Notes			

Project Name:		Catena Lease - S Vac 27 #003		Turn Around		ANALYSIS REQUEST													Work Order Notes							
Project Number:				Routine ☐																						
P.O. Number:				Rush:																						
Sampler's Name:		C:st Eli:ott		Due Date:																						
SAMPLE RECEIPT		Temp Blank:		Yes ☒ No		Wet Ice:		Yes ☒ No																		
Temperature (°C):		19.1.0				Thermometer ID																				
Received Intact:		Yes No																								
Cooler Custody Seals:		Yes No N/A				Correction Factor:																				
Sample Custody Seals:		Yes No N/A				Total Containers:																				
Sample Identification		Matrix		Date Sampled		Time Sampled		Depth		Number of Containers													Sample Comments			
										Chlorides																
HDP4-001 @ 1'bgs		S		5-21-20		11:37		1'		1													X			
HDP4-001 @ 2'bgs		S				11:39		2'		1													X			
HDP4-001 @ 4'bgs		S				11:40		4'		1													X			
HDP4-001 @ 10'bgs		S				11:41		10'		1													X			
HDP4-001 @ 15'bgs		S				11:42		15'		1													X			
HDP4-001 @ 20'bgs		S				11:43		20'		1													X			
HDP5-001 @ 1'bgs		S				11:52		1'		1													X			
HDP5-001 @ 2'bgs		S				11:53		2'		1													X			
HDP5-001 @ 4'bgs		S				11:54		4'		1													X			
HDP5-001 @ 10'bgs		S				11:55		10'		1													X			
HDP5-001 @ 15'bgs		S				11:56		15'		1													X			
HDP5-001 @ 20' bgs		S				11:57		20'		1													X			

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Debi Moore	5-21-20 4pm	2	Debi Moore	5-20-20 3:15pm
3		4			
5		6			



Work Order No:

12/2/20

Work Order Comments	
Program: UST/PRP ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ P/ST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

[illegible]

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	IPRA S. Noorudeen	5-27-20 4pm	DS Moorudeen		5-25-20 3:15pm

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Sport Environmental Services, LLC

Date/ Time Received: 05.28.2020 03.15.00 PM

Work Order #: 662867

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 05.28.2020

Checklist reviewed by:



John Builes

Date: 05.31.2020

Attachment H

Release Site Plan Denoting Sample Locations (May 27, 2020)

Sundown Energy

South Vacuum 27 #003 Release
Location: 32.71451, -103.43543
Image Credit: Google Earth
Image Date: Nov 2, 2017

Sample ID Chloride (mg/kg)

ARB1-001 1'bgs 2,270
ARB1-001 2'bgs 250
ARB1-001 4'bgs 47.2
ARB1-001 10'bgs 15.1
ARB1-001 15'bgs 14
ARB1-001 20'bgs 14
ARB2-001 1'bgs 3,960
ARB2-001 2'bgs 16.1
ARB2-001 4'bgs 84.5
ARB2-001 10'bgs 13.6
ARB2-001 15'bgs 21.9
ARB2-001 20'bgs 44.9
ARB3-001 1'bgs 5,260
ARB3-001 2'bgs 1,920
ARB3-001 4'bgs 2,300
ARB3-001 10'bgs 1,980
ARB3-001 15'bgs 1,950
ARB3-001 20'bgs 1,810
ARB4-001 1'bgs 3,160
ARB4-001 2'bgs 404
ARB4-001 4'bgs 206
ARB4-001 10'bgs 10.7
ARB4-001 15'bgs 3.61
ARB4-001 20'bgs 4.85

Sample ID Chloride (mg/kg)

ARB5-001 1'bgs 6,620
ARB5-001 2'bgs 594
ARB5-001 4'bgs 14.7
ARB5-001 10'bgs 6.37
ARB5-001 15'bgs 6.89
ARB5-001 20'bgs 4.61
ARB6-001 1'bgs 2,720
ARB160012'bgs 423
ARB6-001 4'bgs 165
ARB6-001 10'bgs 2.23
ARB6-001 15'bgs 2.09
ARB6-001 20'bgs 7
ARB7-001 1'bgs 2,770
ARB7-001 2'bgs 390
ARB7-001 4'bgs 229
ARB7-001 10'bgs 3.68
ARB7-001 15'bgs 22.4
ARB7-001 20'bgs 4.4

Sample ID Chloride (mg/kg)

HDP1-001 1'bgs 37.6
HDP1-001 2'bgs 10.5
HDP1-001 4'bgs 7.38
HDP1-001 10'bgs 6.87
HDP1-001 15'bgs 4.13
HDP1-001 20'bgs 11.6
HDP2-001 1'bgs 55.9
HDP2-001 2'bgs 16.5
HDP2-001 4'bgs 13.8
HDP2-001 10'bgs 11.7
HDP2-001 15'bgs 9.49
HDP2-001 20'bgs 10.3
HDP3-001 1'bgs 34.2
HDP3-001 2'bgs 152
HDP3-001 4'bgs 314
HDP3-001 10'bgs 499
HDP3-001 15'bgs 354
HDP3-001 20'bgs 330
HDP4-001 1'bgs 85.1
HDP4-001 2'bgs 21.8
HDP4-001 4'bgs 10
HDP4-001 10'bgs 9.35
HDP4-001 15'bgs 8.99
HDP4-001 20'bgs 10.9

Legend

- Air Rotary Borehole
- Horizontal Delineation Point
- Release Footprint (3.18 acres)

Sample ID Chloride (mg/kg)

HDP5-001 1'bgs 18.7
HDP5-001 2'bgs 12.9
HDP5-001 4'bgs 12.6
HDP5-001 10'bgs 12
HDP5-001 15'bgs 11.2
HDP5-001 20'bgs 9.35
HDP6-001 1'bgs 43.3
HDP6-001 2'bgs 23.5
HDP6-001 4'bgs 18.5
HDP6-001 10'bgs 14
HDP6-001 15'bgs 13.3
HDP6-001 20'bgs 13.3
HDP7-001 1'bgs 21.7
HDP7-001 2'bgs 23.3
HDP7-001 4'bgs 12.5
HDP7-001 10'bgs 12.2
HDP7-001 15'bgs 14.6
HDP7-001 20'bgs 25.5
HDP8-001 1'bgs 99.8
HDP8-001 2'bgs 86.1
HDP8-001 4'bgs 222
HDP8-001 10'bgs 1,430
HDP8-001 15'bgs 689
HDP8-001 20'bgs 80.2

Google Earth

200 ft