

Incident ID	nAPP2302541480
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: Mark Ritchie Title: HSE Manager

Signature: Mark Ritchie Date: 4/13/2023

email: mr Ritchie@silverbackexp.com Telephone: 210-874-2406

**OCD Only**

Received by: Robert Hamlet Date: 8/31/2023

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: Robert Hamlet Date: 8/31/2023

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced



**SITE CHARACTERIZATION, ASSESSMENT, REMEDIATION, AND  
CLOSURE REPORT**

**SHUDDE 27 CTB – LOAD LINE AREA  
32.722668, -104.360797  
UNIT D, SECTION 26, T18S-R26E  
EDDY COUNTY, NEW MEXICO  
NMOCD INCIDENT ID # nAPP2302538491 & nAPP2302541480**

**PREPARED FOR:**

**SILVERBACK OPERATING  
ARTESIA DIVISION  
108 S 4TH STREET  
ARTESIA, NEW MEXICO 88210**

**PREPARED BY:**

**RANGER ENVIRONMENTAL SERVICES, LLC  
P.O. BOX 201179  
AUSTIN, TEXAS 78720**

**APRIL 13, 2023**

A blue ink signature of Mr. William Kierdorf, consisting of a stylized 'W' followed by several loops.

**Mr. William Kierdorf, REM  
Project Manager**

A blue ink signature of Mr. Max Cook, featuring a stylized 'M' and 'C'.

**Mr. Max Cook, CAPM (TX)  
Senior Project Manager**

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### FORM C-141

#### FIGURES

- Topographic Map
- Area Map
- DTGW Information Location Map
- National Wetland Inventory Map
- FEMA Floodplain Map
- Karst Topography Map
- Assessment Sample Location Map
- Final Excavation Area and Confirmation Sample Location Map

#### TABLES

- Site Assessment Soil BTEX (EPA 8260), TPH (EPA 8015) & Chloride (SM 4500) Analytical Data
- Confirmation Sample Soil BTEX (EPA 8260), TPH (EPA 8015) & Chloride (SM 4500) Analytical Data

#### ATTACHMENTS

- Attachment 1 – Depth-to-Groundwater Data
- Attachment 2 – Photographic Documentation
- Attachment 3 – Laboratory Analytical Reports
- Attachment 4 – NMOCD Correspondence



**SITE CHARACTERIZATION, ASSESSMENT, REMEDIATION, AND CLOSURE REPORT  
SHUDE 27 CTB – LOAD LINE AREA  
32.722668, -104.360797  
EDDY COUNTY, NEW MEXICO  
NMOCD INCIDENT ID # nAPP2302538491 & nAPP2302541480**

**1.0 SITE LOCATION AND BACKGROUND**

The Shude 27 CTB (Site) is located on private property, approximately 8.5 miles south-southeast of Artesia, within Eddy County, New Mexico. The Site is situated in Unit D, Section 26, T18S-R26E at GPS coordinates 32.722668, -104.360797.

On January 13, 2023, a release was discovered at the Site originating from a water load line located on the southern portion of the facility pad. A control valve on the water load line was inadvertently left open resulting in the release of approximately 20 barrels (bbls) of produced water. Upon discovery the valve was closed, and a vacuum truck was dispatched to the location to recover all available fluids. On January 19, 2023, an additional release was discovered at the Site due to the valve on the water load line being left open resulting in the release of approximately 15 bbls. Upon discovery of the additional release, a vacuum truck was dispatched to the location to recover all available fluids. Based on the location of the releases, the areas impacted by the incidents were noted to share the same approximate footprint on the southern extent of the facility pad and immediately south of the facility boundary. Due to the volume and nature of the releases the incidents were reported to the New Mexico Oil Conservation Division (NMOCD) (NMOCD Incident # nAPP2302538491 and nAPP2302541480).

Silverback Operating (Silverback) has engaged Ranger Environmental Services, LLC (Ranger) to assist in the remediation efforts at the Site. On January 31, 2023, Ranger personnel and representatives of Silverback conducted an initial assessment of the impacted area which included the collection of soil samples for laboratory analysis. Subsequently, remedial efforts were completed to bring the impacted areas into compliance with NMAC 19.15.29. Due to the shared impact area from the releases, the two incidents were addressed in conjunction with one another. The following report has been prepared to provide details of the site characterization, site assessment, and remedial actions undertaken to address the impacts from the releases.

The previously submitted Initial C-141 Form Release Notifications are attached. Additionally, Site Assessment/Characterization and Closure sections of Form C-141, are attached. A Topographic Map and Area Map noting the location of the Site and surrounding areas, and site maps illustrating Site features and sampling locations, are provided in the Figures section.

## **2.0 SITE CHARACTERIZATION**

### **2.1 Depth-to-Groundwater**

To determine the depth-to-groundwater in the vicinity of the Site, data available from the U.S. Geological Survey (USGS) and the New Mexico Office of the State Engineer (NMOSE) was reviewed. Based upon the reviewed information, one water well (RA 10940) was identified within a half-mile of the Site. Upon review of the water well data, depth-to-groundwater in the well is documented to be approximately 75 feet below ground surface (bgs). The data is noted to be within the NMOCD acceptable distance and time-frame criteria.

Based upon the reviewed information, the depth-to-groundwater in the area of the Site appears to be approximately 75 feet bgs. Depth-to-groundwater information that was reviewed as part of this assessment is attached.

### **2.2 Wellhead Protection Area**

Based upon the USGS and NMOSE information, one water source (water well RA 10490) was identified within a half-mile of the Site.

Upon review of the National Wetland Inventory, the impacted area is not within 300 feet of a mapped feature.

The Site and impacted area are outside of the FEMA 100-year flood plain and fall in the area of minimal flood hazard.

The Site area is within an area of "Medium Karst" probability and is noted to be immediately adjacent to an area of "Low Karst" probability.

### **2.3 Distance to Nearest Significance Watercourse**

Based upon available online resources, no significant water courses are located within a half-mile of the site.

### **2.4 Closure Criteria**

Based upon the Site characterization details, and per NMAC 19.15.29.12, the Site was remediated to Table 1 19.15.29.12 NMAC Table 1 (groundwater 51-100 feet) criteria (Table 1 Closure Criteria). Additionally, the remediation activities were conducted to bring the area into compliance with the Restoration, Reclamation and Re-Vegetation Criteria (Restoration Criteria) detailed in NMAC 19.15.29.13. The regulatory criteria are summarized below:

REGULATORY STANDARD	CHLORIDE	TPH (GRO+DRO +MRO)	TPH (GRO+DRO)	BTEX	BENZENE
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW 51'-100')	10,000	2,500	1,000	50	10
19.15.29.13 NMAC Restoration, Reclamation and Re-Vegetation (Soils 0'-4')	600	100*	---	50*	10*

All Values Presented in Parts Per Million (mg/Kg)

\*Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of the Spill Rule (19.15.29 NMAC) dated September 6, 2019.

### 3.0 SITE ASSESSMENT, REMEDIATION, AND CONFIRMATION SAMPLING

#### 3.1 January 31, 2023 – Site Assessment

On January 31, 2023, Ranger personnel and representatives of Silverback completed assessment activities in areas impacted by both releases. The assessment process included the installation of excavation test holes and the collection of soil samples for laboratory analysis.

During the January 31, 2023 assessment, a total of six test excavations (TH-1 through TH-6) were completed. The test excavations were completed to a maximum depth of approximately four feet bgs. During the test hole installation process, field screening of the encountered soils were analyzed by Ranger personnel at the surface and at approximate one-foot intervals using an organic vapor monitor (OVM) and a field chloride titration kit to assist in evaluating soil conditions and/or levels of impacts in the area.

In order to document site conditions, a minimum of two soil samples were collected for laboratory analysis from each test hole location. A total of 13 samples were collected from the area during the January 31, 2023 site assessment activities. Upon collection, the soil samples were submitted to Cardinal Laboratories in Hobbs, New Mexico for analysis of total petroleum hydrocarbons (TPH) using EPA Method 8015; benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8021; and, total chloride using SM 4500. The samples were collected and managed using standard QA/QC and chain-of-custody procedures.

The initial assessment soil sample analytical results are summarized in the attached table. A copy of the laboratory analytical report is also attached.

#### 3.2 Site Remediation and Confirmation Sampling

In order to address the impacts at the Site and bring the location into compliance with NMAC 19.15.29, soil removal operations were completed at the Site in March 2023. Based on the information collected during the Site assessment activities, initial removal operations were completed to depths and boundaries anticipated to be within the closure criteria. During the excavation process, Ranger personnel collected field readings utilizing an OVM and field chloride titration kit to guide the excavation boundaries and depths.

Upon completion of the soil removal operations, the excavated area was irregular in shape and was documented to have maximum dimensions of approximately 125 feet by 107 feet. The

excavation area was completed to depths varying from approximately one to a maximum of four feet bgs.

To confirm that the excavated areas had been completed to appropriate boundaries, cleanup confirmation soil samples were collected as five-part composite samples in accordance with NMAC 19.15.29.12, with each sample representing less than 200 square feet. Cleanup confirmation soil sampling activities were conducted on March 21, 2023. Prior to the cleanup confirmation sampling event, notice was provided to the NMOCD in accordance with NMAC 19.15.29.12(D). A copy of the notification is attached.

Upon collection, all cleanup confirmation soil samples were submitted to Cardinal Laboratories in Hobbs, New Mexico for TPH, BTEX, and, total chloride analysis using the aforementioned laboratory methods. The samples were collected and managed using standard QA/QC and chain-of-custody procedures.

A *Final Excavation and Confirmation Sample Location Map* depicting the final excavation boundaries and the cleanup confirmation sample locations is attached.

### **3.3 Final Confirmation Sample Results**

Upon review of the cleanup confirmation laboratory sample results, all areas have been documented to be in attainment of the Restoration, Reclamation and Re-Vegetation criteria detailed in NMAC 19.15.29.13 and/or NMAC 19.15.9.12 Table 1 (DTGW 51'-100') criteria. A comprehensive sample results table summarizing the laboratory analytical results for the cleanup confirmation soil samples attached. A copy of the laboratory analytical report including chain-of-custody documentation is also attached.

### **3.4 Waste Disposal**

All soils generated during the remedial excavation activities were transported and disposed of at Lea Land disposal facility in Lea County, New Mexico.

## **4.0 SITE CLOSURE**

### **4.1 Site Backfill & Re-seeding**

Based on the cleanup confirmation soil sample results, the excavated area will be backfilled with clean fill material in accordance with NMAC 19.15.29.12 and NMAC 19.15.29.13. The surface portion of the on-pad impact/remediation area will be completed with caliche pad material. Re-vegetation efforts in the off-pad impact/remediation area will be completed in accordance with NMAC 19.15.29.13.

### **4.2 Closure Request**

Based on the analytical results for the cleanup confirmation soil samples, the site has been properly addressed pursuant to NMAC 19.15.29 and Silverback respectfully requests closure of the incident. A final C-141 form is attached.

FORM 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	nAPP2302538491
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Silverback Operating	OGRID 330968
Contact Name Mark Ritchie	Contact Telephone 210-874-2406
Contact email mritchie@silverbackexp.com	Incident # (assigned by OCD)
Contact mailing address 108 S. 4th st Artesia, NM 88211	

### Location of Release Source

Latitude 32.722668 Longitude -104.360797  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Shudde 27 CTB	Site Type Central Tank Battery
Date Release Discovered 1-13-2023	API# (if applicable)

Unit Letter	Section	Township	Range	County
D	26	18S	26E	Eddy

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: HINKLE, R R COMPANY, INC & SCHERTZ, MORRIS E)

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 20	Volume Recovered (bbls) 20
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Water hauler left water load line valve open. Mistake was caught shortly after by next truck who began to recover standing fluid.

Form C-141

State of New Mexico  
Oil Conservation Division

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Incident ID	nAPP2302538491
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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?  	

**Initial Response**

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:  Standing fluid was removed so there was no need to contain the released material, and release was contained mostly to the lease road where fencing off would have prevented egress in an emergency event.	
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>Mark Ritchie</u>	Title: <u>HSE Manager</u>
Signature: <u></u>	Date: <u>1/25/2023</u>
email: <u>mritchie@silverbackexp.com</u>	Telephone: <u>210-874-2406</u>
<b><u>OCD Only</u></b> Received by: <u>Jocelyn Harimon</u> Date: <u>01/30/2023</u>	


**SILVERBACK**  
EXPLORATION

Volume Justification Sheet – Silverback Form 018

### Volume Justification

This form is to be used to convey justification of spill volumes in the event of a release. Clearly indicate by calculations or description in the space provided below.

**Justification:** Run ticket from water hauler who removed standing fluid showing 20bbls.

<b>Alliance Trucking, LLC</b> PO Box 1599 Artesia, New Mexico, 88211 (575) 736-7468		<b>DELIVERY TICKET:</b> <b>Nº 308880</b>	
Company: <u>Silver Back</u>		Date: <u>01-13-2023</u>	
Lease: <u>Schodde 27 CTB</u>		Ordered By: <u>Rafael</u>	
Rig #:	AFE #:	County: <u>Eddy County NM</u>	

FW Ticket #	BBLS	RATE	CHARGE
BW Ticket #	BBLS		
SWD Ticket # <u>955-16349</u>	BBLS <u>120</u>	<u>.90</u>	<u>108.00</u>
Chemical	GLNS		
Start Time <u>8:00 am</u> End Time <u>8:00 am</u> Total Hours <u>6 hrs</u>		<u>9.00</u>	<u>570.00</u>
DESCRIPTION			
<u>Drive to location and suck all the water from the ground clean the best and top off from the frack pond and take it to public SWD and drive back home (20 BBL spill)</u>		SUBTOTAL	<u>678.00</u>
		TAX	
		TOTAL	
Driver: <u>Donel L. Leborn</u>	Trk #: <u>68</u>		

Received By: \_\_\_\_\_ ☐ Pump Truck ☒ Vacuum Truck

**Approved by:** Mark Ritchie

**Date:** 1/25/2023

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS  
  
Action 179572

CONDITIONS

Operator: Silverback Operating II, LLC IH10 West, Suite 201 San Antonio, TX 78257	OGRID: 330968
	Action Number: 179572
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	1/30/2023

Incident ID	nAPP2302538491
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>~75'</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

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

State of New Mexico  
Oil Conservation Division

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Printed Name: Mark Ritchie Title: HSE Manager  
Signature: Mark Ritchie Date: 4/13/2023  
email: mritchie@silverbackexp.com Telephone: 210-874-2406

**OCD Only**

Received by: Jocelyn Harimon Date: 04/13/2023



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

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

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Printed Name: Mark Ritchie Title: HSE Manager

Signature: Mark Ritchie Date: 4/13/2023

email: mritchie@silverbackexp.com Telephone: 210-874-2406

**OCD Only**

Received by: Jocelyn Harimon Date: 04/13/2023

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: \_\_\_\_\_

**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	nAPP2302541480
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Silverback Operating	OGRID 330968
Contact Name Mark Ritchie	Contact Telephone 210-874-2406
Contact email mritchie@silverbackexp.com	Incident # (assigned by OCD)
Contact mailing address 108 S. 4th st Artesia, NM 88211	

### Location of Release Source

Latitude 32.722668 Longitude -104.360797  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Shudde 27 CTB	Site Type Central Tank Battery
Date Release Discovered 1-19-2023	API# (if applicable)

Unit Letter	Section	Township	Range	County
D	26	18S	26E	Eddy

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: HINKLE, R R COMPANY, INC & SCHERTZ, MORRIS E)

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 15	Volume Recovered (bbls) 15
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Locked out valve on water load line had enough room to partially open and water hauler neglected to close after attempting to fill their truck.



Form C-141

State of New Mexico  
Oil Conservation Division

Page 2

Incident ID	nAPP2302541480
District RP	
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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

**Initial Response**

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:  Standing fluid was removed so there was no need to contain the released material, and release was contained mostly to the lease road where fencing off would have prevented egress in an emergency event.
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>Mark Ritchie</u> Title: <u>HSE Manager</u> Signature: <u></u> Date: <u>1/25/2023</u> email: <u>mritchie@silverbackexp.com</u> Telephone: <u>210-874-2406</u>
<b><u>OCD Only</u></b> Received by: <u>Jocelyn Harimon</u> Date: <u>01/30/2023</u>


**SILVERBACK**  
EXPLORATION

Volume Justification Sheet – Silverback Form 018

### Volume Justification

This form is to be used to convey justification of spill volumes in the event of a release. Clearly indicate by calculations or description in the space provided below.

**Justification:** Run ticket from water hauler who removed standing fluid showing 15bbls.

**Alliance Trucking, LLC**  
PO Box 1599 Artesia, New Mexico, 88211  
(575) 736-7468

Company: Silverback Operating DELIVERY TICKET: NO 308903  
Lease: shuttled 27 CTB Date: 1-19-2023  
Rig #: \_\_\_\_\_ Ordered By: \_\_\_\_\_  
AFE #: \_\_\_\_\_ County: Eddy County N.M.

FW Ticket #	BW Ticket #	SWD Ticket #	Chemical	Start Time	End Time	Total Hours	DESCRIPTION	BBLS	GLNS	RATE	CHARGE
		<u>Nixon</u>		<u>9:00</u> am / pm	<u>3:00</u> am / pm	<u>6 hrs</u>	<u>Drove to location and clean all the mess in the ground. We recovered 15 bbls from the ground and take it to Disposal. It drove back to the track pond to top off.</u>	<u>120</u>			
								SUBTOTAL			
								TAX			
Driver: <u>Daniel Zlabacian</u>								Trk #: <u>68</u>	TOTAL		

Received By: \_\_\_\_\_ ☐ Pump Truck ☒ Vacuum Truck

Approved by: Mark Ritchie

Date: 1/25/2023

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS

Action 179577

CONDITIONS

Operator: Silverback Operating II, LLC IH10 West, Suite 201 San Antonio, TX 78257	OGRID: 330968
	Action Number: 179577
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	1/30/2023

Incident ID	nAPP2302541480
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>~75'</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

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

Incident ID	nAPP2302541480
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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: Mark Ritchie Title: HSE Manager

Signature: Mark Ritchie Date: 4/13/2023

email: mritchie@silverbackexp.com Telephone: 210-874-2406

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_



Incident ID	nAPP2302541480
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: Mark Ritchie Title: HSE Manager

Signature: Mark Ritchie Date: 4/13/2023

email: mr Ritchie@silverbackexp.com Telephone: 210-874-2406

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

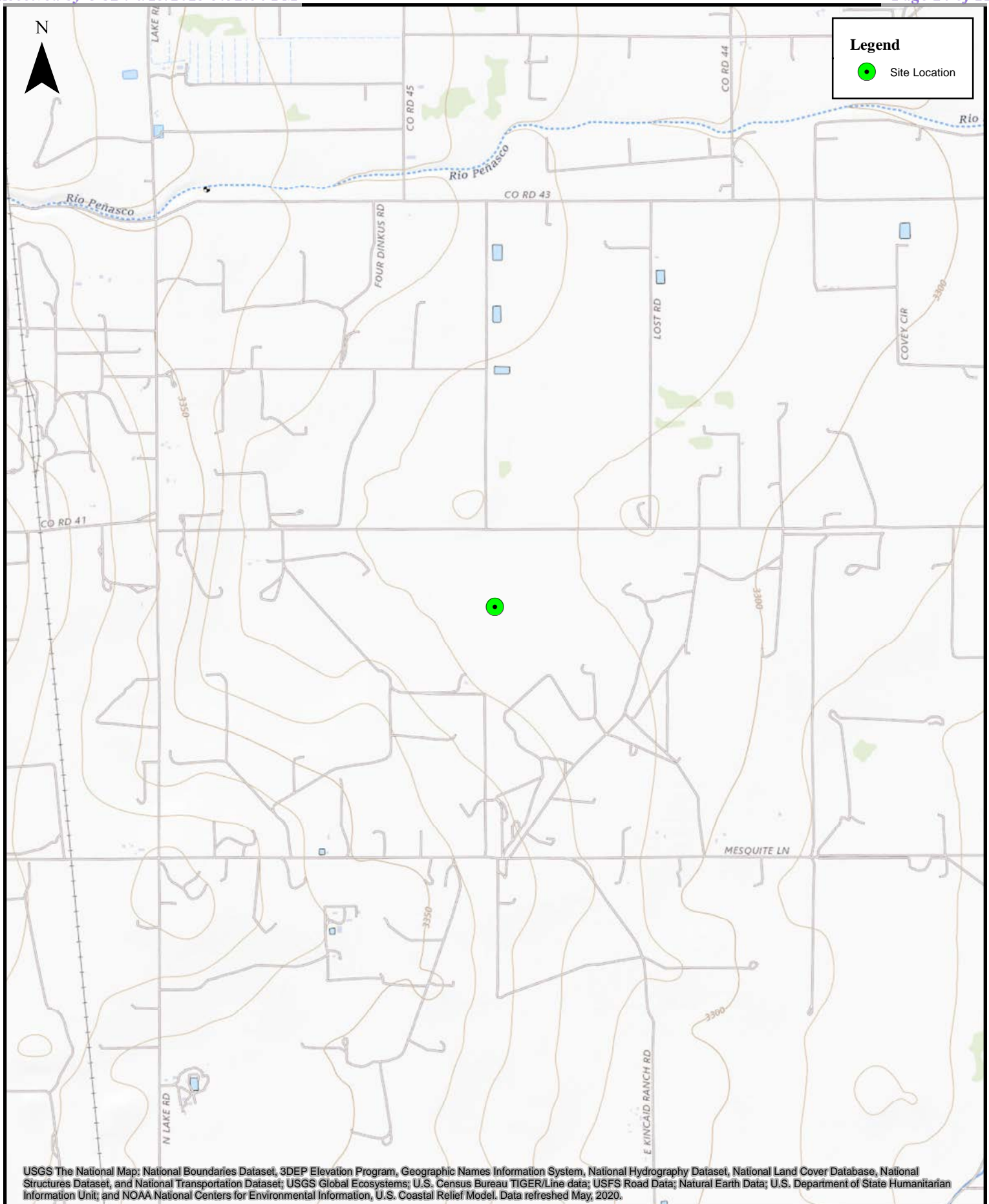
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance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

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

## FIGURES

Topographic Map  
Area Map  
DTGW Information Location Map  
National Wetland Inventory Map  
FEMA Floodplain Map  
Karst Topography Map  
Assessment Sample Location Map  
Final Excavation Area and Confirmation Sample Location Map

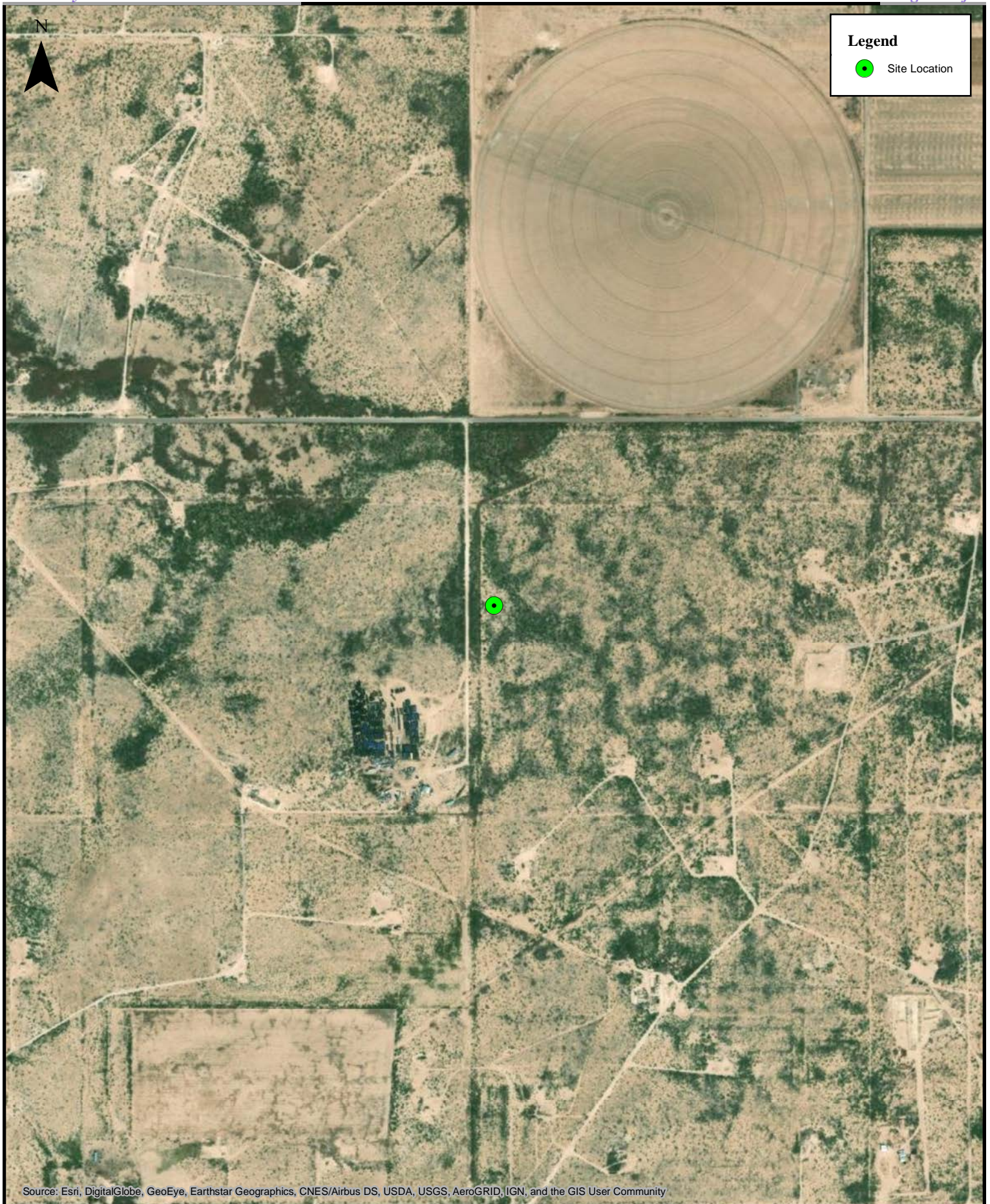


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**Topographic Map**  
Shudde 27 CTB  
Siverback Operating



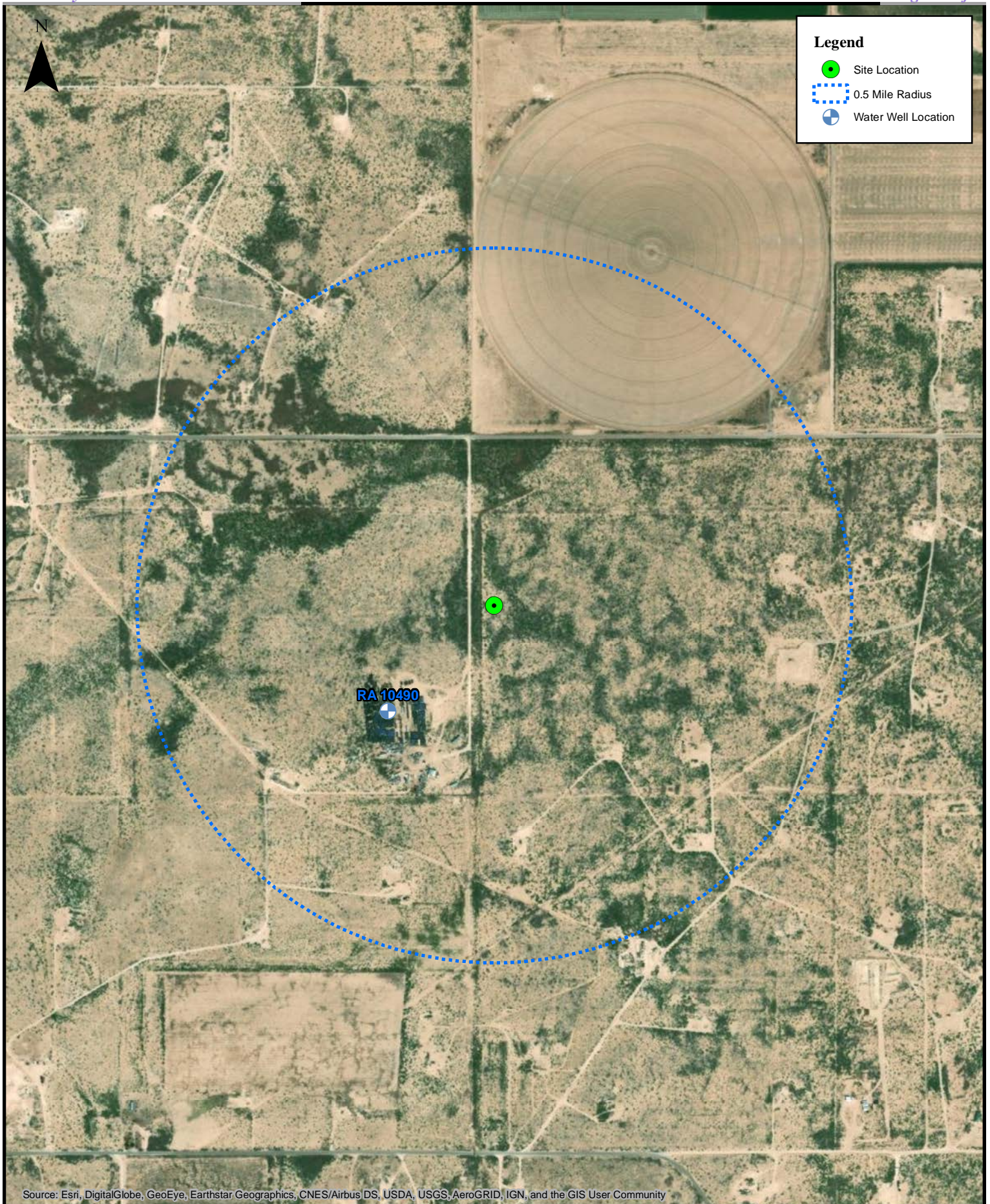


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1:10,000

**Area Map**  
Shudde 27 CTB  
Siverback Operating





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus/DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



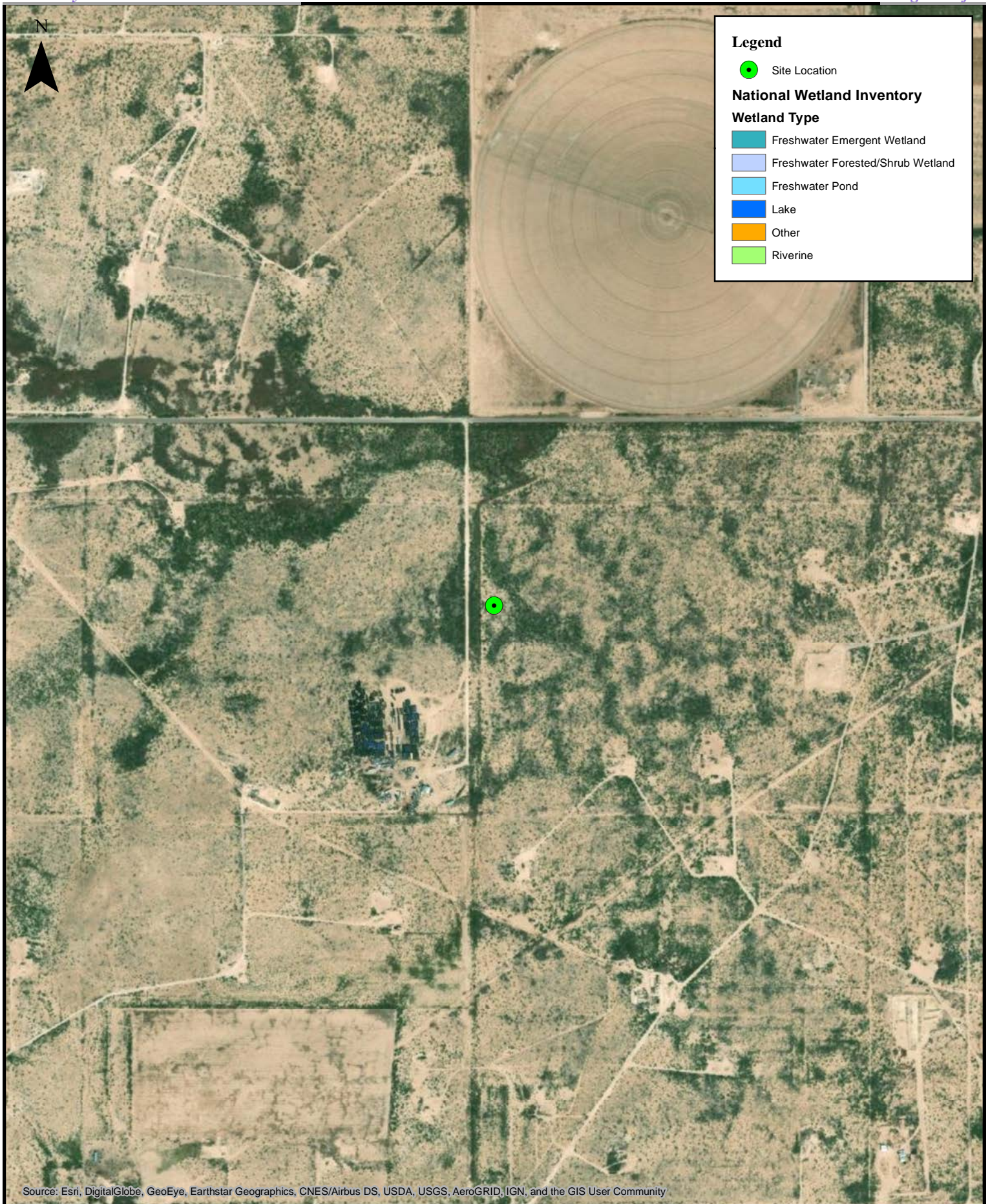
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### DTGW Information Location Map

Shudde 27 CTB  
Siverback Operating





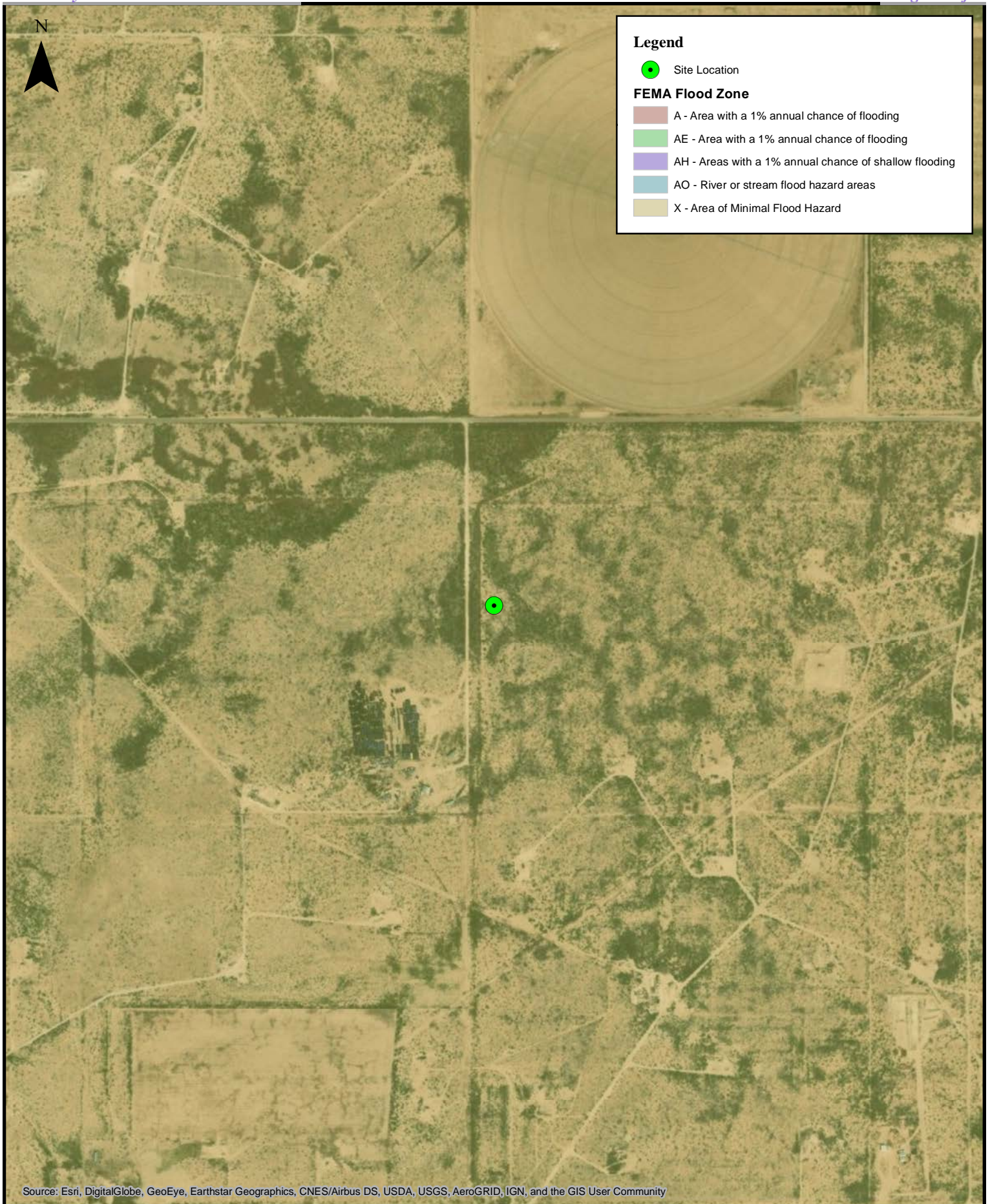
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**National Wetland Inventory Map**

Shudde 27 CTB  
Siverback Operating





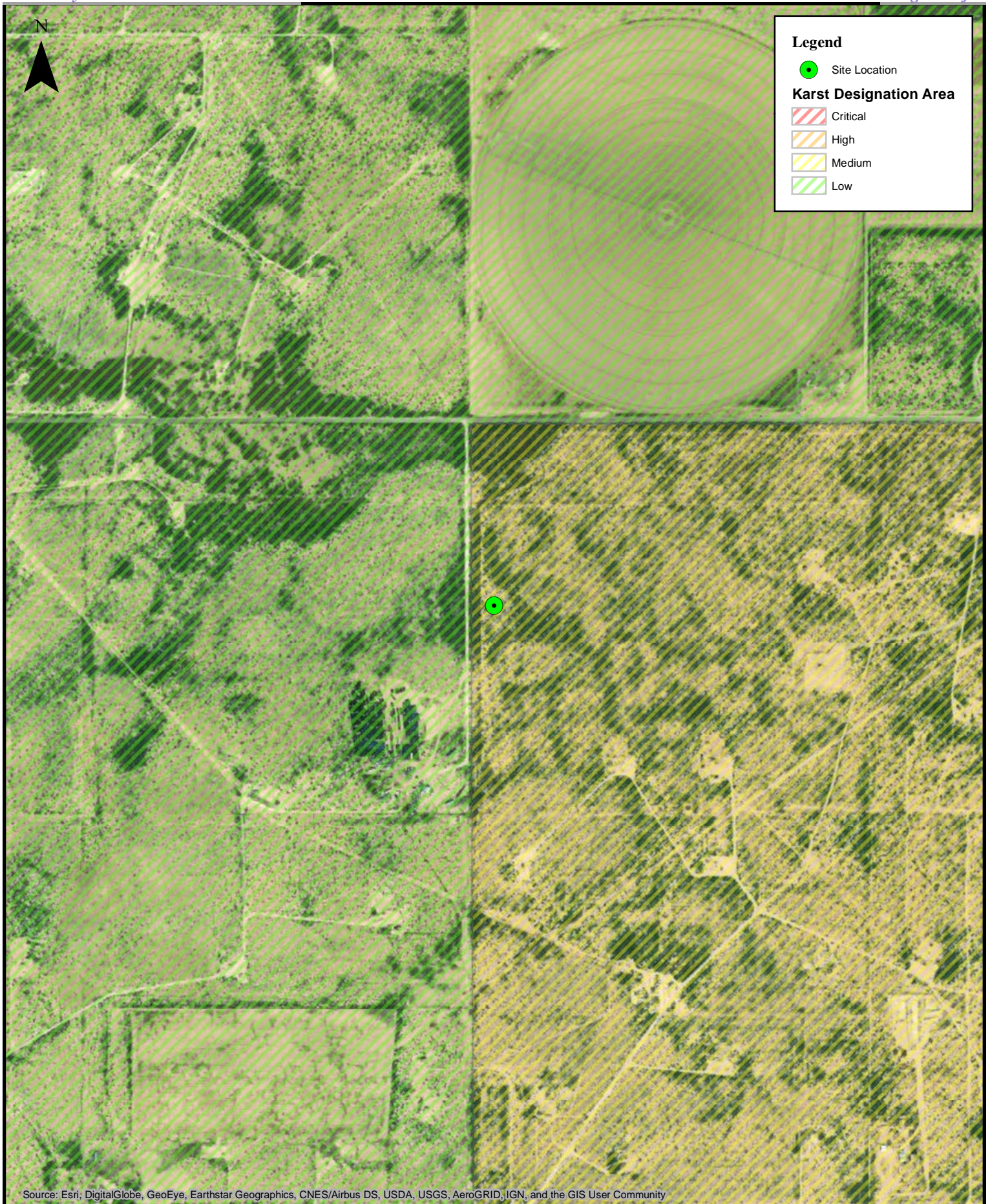


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**FEMA Floodplain Map**  
Shudde 27 CTB  
Siverback Operating



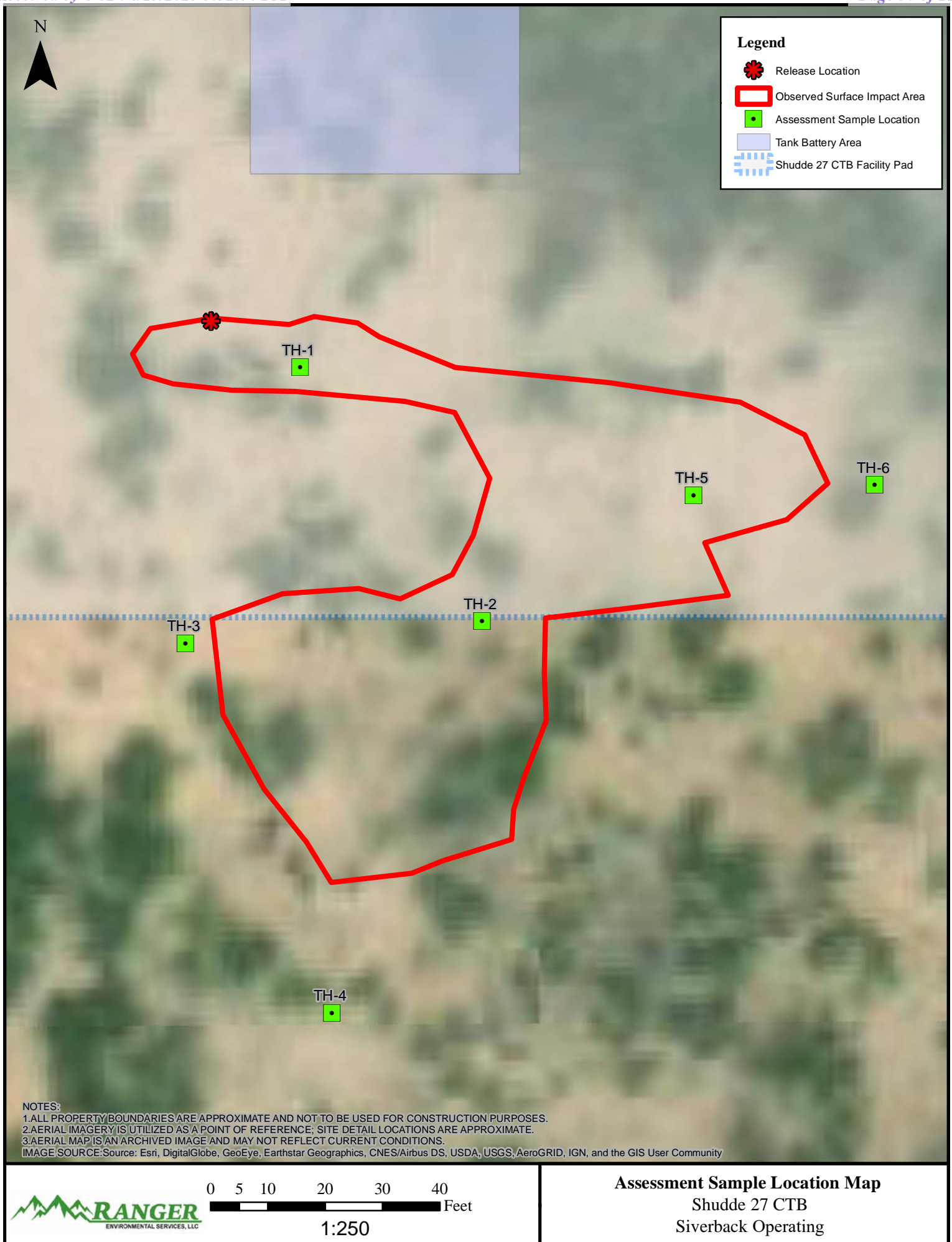


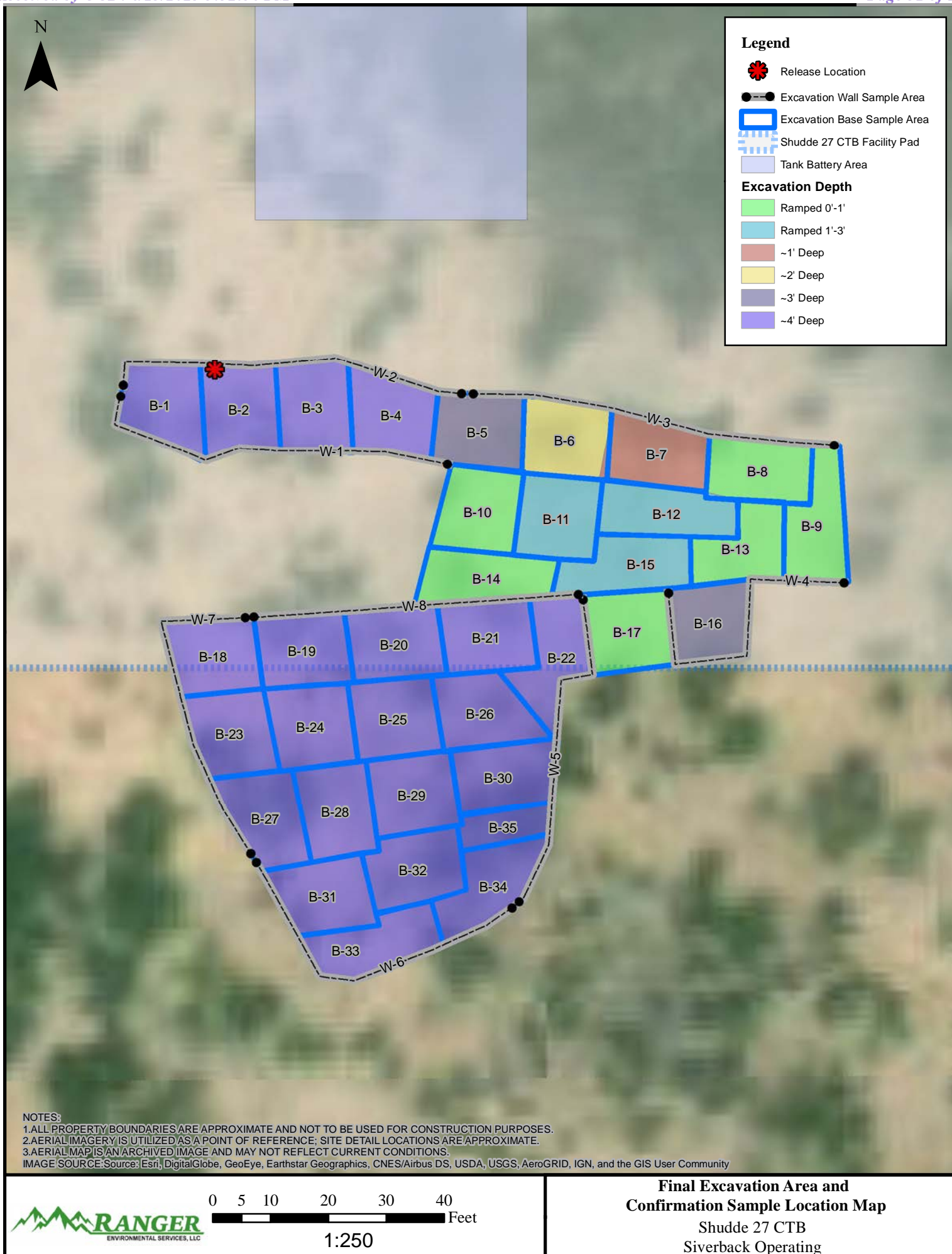
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1:10,000

**Karst Topography Map**  
Shudde 27 CTB  
Siverback Operating







## TABLES

Site Assessment Soil BTEX (EPA 8260), TPH (EPA 8015) &  
Chloride (SM 4500) Analytical Data

Confirmation Sample Soil BTEX (EPA 8260), TPH (EPA 8015) &  
Chloride (SM 4500) Analytical Data



**SITE ASSESSMENT SOIL SAMPLE BTEX (EPA 8021), TPH (SW 8015) & CHLORIDE (SM 4500) ANALYTICAL DATA**  
**SILVERBACK OPERATING**  
**SHUDDE 27 CT - LOAD LINE AREA**

All values presented in parts per million (mg/Kg)

SAMPLE ID	DATE	DEPTH (FT)	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C36	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	CHLORIDE
TH-1/1	1/31/2023	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	304
TH-1/4	1/31/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	432
TH-2/3	1/31/2023	3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	576
TH-2/4	1/31/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	976
TH-3/1	1/31/2023	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	<b>800</b>
TH-3/2	1/31/2023	2'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	208
TH-3/4	1/31/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	224
TH-4/1	1/31/2023	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	528
TH-4/4	1/31/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	432
TH-5/3	1/31/2023	3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	<b>704</b>
TH-5/4	1/31/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	256
TH-6/1	1/31/2023	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	80.0
TH-6/3'	1/31/2023	3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	320
<b>19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW 51'-100')</b>			<b>10</b>	---	---	---	<b>50</b>	---	---	---	<b>1,000</b>	<b>2,500</b>	<b>10,000</b>
<b>19.15.29.13 NMAC Reclamation Criteria (0'-4' Soils Only)</b>			<b>10<sup>3</sup></b>	---	---	---	<b>50<sup>3</sup></b>	---	---	---	---	<b>100<sup>3</sup></b>	<b>600</b>

**Notes:**

- Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow.
- Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type.
- Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of the Spill Rule (19.15.29 NMAC) dated September 6, 2019.


CONFIRMATION SOIL SAMPLE BTEX (EPA 8021), TPH (SW 8015) & CHLORIDE (SM 4500) ANALYTICAL DATA SILVERBACK OPERATING SHUDDE 27 CTB - LOAD LINE AREA													
All values presented in parts per million (mg/Kg)													
SAMPLE ID	DATE	DEPTH (FT)	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C36	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	CHLORIDE
<b>Excavation Side Wall Samples</b>													
W-1	3/21/2023	0'-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	384
W-2	3/21/2023	0'-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	372
W-3	3/21/2023	0'-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	160
W-4	3/21/2023	0'-3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	560
W-5	3/21/2023	0'-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	272
W-6	3/21/2023	1'-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	352
W-7	3/21/2023	0'-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	240
W-8	3/21/2023	0'-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	352
W-9	3/21/2023	0'-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	192
W-10	3/21/2023	0'-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	384
<b>Excavation Base Samples</b>													
B-1	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	1,260
B-2	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	800
B-3	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	1,220
B-4	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	2,120
B-5	3/21/2023	3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	176
B-6	3/21/2023	2'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	192
B-7	3/21/2023	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	160
B-8	3/21/2023	0'-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	176
B-9	3/21/2023	0'-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	160
B-10	3/21/2023	0'-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	160
B-11	3/21/2023	1'-3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	224
B-12	3/21/2023	1'-3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	224
B-13	3/21/2023	0'-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	240
B-14	3/21/2023	0'-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	240
B-15	3/21/2023	1'-2'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	320
B-16	3/21/2023	3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	272
B-17	3/21/2023	1'-3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	368
B-18	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	1,140
B-19	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	800
B-20	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	416
B-21	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	1,720
B-22	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	1,170
B-23	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	864
B-24	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	912
B-25	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	1,220
B-26	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	720
B-27	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	1,650
B-28	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	1,460
B-29	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	912
B-30	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	128
B-31	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	768
B-32	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	768
B-33	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	288
B-34	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	432
B-35	3/21/2023	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	496
<b>19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW 51'-100')</b>			<b>10</b>	---	---	---	<b>50</b>	---	---	---	<b>1,000</b>	<b>2,500</b>	<b>10,000</b>
<b>19.15.29.13 NMAC Reclamation Criteria (0'-4' Soils Only)</b>			<b>10<sup>3</sup></b>	---	---	---	<b>50<sup>3</sup></b>	---	---	---	---	<b>100<sup>3</sup></b>	<b>600</b>
Notes:													
1. Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow.													
2. Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type.													
3. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of the Spill Rule (19.15.29 NMAC) dated September 6, 2019.													

## ATTACHMENT 1 – DEPTH-TO-GROUNDWATER INFORMATION



# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)				(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y		
	RA 10490		4	2	27	18S	26E	559659	3620486*		
<hr/>											
Driller License:	1229	Driller Company:				CARTER'S WELL DRILLING					
Driller Name:	CARTER, RICHARD M.										
Drill Start Date:	03/18/2004	Drill Finish Date:				04/20/2004		Plug Date:			
Log File Date:	06/01/2004	PCW Rcv Date:						Source:		Shallow	
Pump Type:	SUBMER	Pipe Discharge Size:						Estimated Yield:		5 GPM	
Casing Size:	4.50	Depth Well:				200 feet		Depth Water:		75 feet	
<hr/>											
Water Bearing Stratifications:					Top	Bottom	Description				
					100	110	Other/Unknown				
					185	190	Other/Unknown				
<hr/>											
Casing Perforations:					Top	Bottom					
					100	200					
<hr/>											

\*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.

## ATTACHMENT 2 – SITE PHOTOGRAPHS



**PHOTOGRAPH NO. 1 – A view of the January 13, 2023 release upon discovery. The view is towards the southwest.**

*(Approximate GPS Coordinates: 32.722879, -104.360521)*



**PHOTOGRAPH NO. 2 – A view of the site during the site assessment activities completed on January 31, 2023. The view is towards the north.**

*(Approximate GPS Coordinates: 32.722772, -104.360836)*





**PHOTOGRAPH NO. 3 – A view of the excavation area upon completion of the remedial operations at the site. The view is towards the southeast.**

*(Approximate GPS Coordinates: 32.722942, -104.361016)*



**PHOTOGRAPH NO. 4 – An additional view of the excavation area upon completion of the remedial operations at the site. The view is towards the northeast.**

*(Approximate GPS Coordinates: 32.722606, -104.360916)*

## ATTACHMENT 3 – LABORATORY REPORTS





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

February 06, 2023

WILL KIERDORF

RANGER ENVIRONMENTAL SERVICES, INC.

PO BOX 201179

AUSTIN, TX 78729

RE: SHUDDE 27 CTB

Enclosed are the results of analyses for samples received by the laboratory on 02/02/23 13:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 1/1 (H230466-01)**

BTEX 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2023	ND	2.01	101	2.00	5.27		
Toluene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	2.81		
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.03	101	2.00	2.93		
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.15	102	6.00	2.28		
Total BTEX	<0.300	0.300	02/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	02/02/2023	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	201	100	200	3.55	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	214	107	200	5.22	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 75.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.3 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 1/4 (H230466-02)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2023	ND	2.01	101	2.00	5.27	
Toluene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	2.81	
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.03	101	2.00	2.93	
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.15	102	6.00	2.28	
Total BTEX	<0.300	0.300	02/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	02/02/2023	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	201	100	200	3.55	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	214	107	200	5.22	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 74.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 2/3 (H230466-03)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2023	ND	2.01	101	2.00	5.27		
Toluene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	2.81		
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.03	101	2.00	2.93		
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.15	102	6.00	2.28		
Total BTEx	<0.300	0.300	02/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	576	16.0	02/02/2023	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	201	100	200	3.55	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	214	107	200	5.22	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 65.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 73.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 2/4 (H230466-04)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2023	ND	2.01	101	2.00	5.27	
Toluene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	2.81	
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.03	101	2.00	2.93	
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.15	102	6.00	2.28	
Total BTEX	<0.300	0.300	02/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	976	16.0	02/02/2023	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	201	100	200	3.55	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	214	107	200	5.22	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 82.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.1 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 3/1 (H230466-05)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2023	ND	2.01	101	2.00	5.27	
Toluene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	2.81	
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.03	101	2.00	2.93	
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.15	102	6.00	2.28	
Total BTEX	<0.300	0.300	02/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	800	16.0	02/02/2023	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	201	100	200	3.55	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	214	107	200	5.22	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 75.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.6 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 3/2 (H230466-06)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2023	ND	2.07	103	2.00	3.28		
Toluene*	<0.050	0.050	02/03/2023	ND	2.11	105	2.00	3.47		
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	4.09		
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.33	106	6.00	4.40		
Total BTEx	<0.300	0.300	02/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	02/02/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	201	100	200	3.55	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	214	107	200	5.22	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 71.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 3/4 (H230466-07)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2023	ND	2.07	103	2.00	3.28		
Toluene*	<0.050	0.050	02/03/2023	ND	2.11	105	2.00	3.47		
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	4.09		
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.33	106	6.00	4.40		
Total BTEx	<0.300	0.300	02/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	02/02/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	201	100	200	3.55	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	214	107	200	5.22	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 72.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 4/1 (H230466-08)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2023	ND	2.07	103	2.00	3.28		
Toluene*	<0.050	0.050	02/03/2023	ND	2.11	105	2.00	3.47		
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	4.09		
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.33	106	6.00	4.40		
Total BTEx	<0.300	0.300	02/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	528	16.0	02/02/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	201	100	200	3.55	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	214	107	200	5.22	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 74.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.4 % 49.1-148

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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 4/4 (H230466-09)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2023	ND	2.07	103	2.00	3.28		
Toluene*	<0.050	0.050	02/03/2023	ND	2.11	105	2.00	3.47		
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	4.09		
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.33	106	6.00	4.40		
Total BTEx	<0.300	0.300	02/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	432	16.0	02/02/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	201	100	200	3.55	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	214	107	200	5.22	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 77.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 5/3 (H230466-10)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2023	ND	2.07	103	2.00	3.28		
Toluene*	<0.050	0.050	02/03/2023	ND	2.11	105	2.00	3.47		
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	4.09		
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.33	106	6.00	4.40		
Total BTEx	<0.300	0.300	02/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	704	16.0	02/02/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	201	100	200	3.55	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	214	107	200	5.22	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 80.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 5/4 (H230466-11)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2023	ND	2.07	103	2.00	3.28		
Toluene*	<0.050	0.050	02/03/2023	ND	2.11	105	2.00	3.47		
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	4.09		
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.33	106	6.00	4.40		
Total BTEX	<0.300	0.300	02/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	02/02/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	244	122	200	4.41	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	213	106	200	5.34	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 73.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.6 % 49.1-148

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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 6/1 (H230466-12)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2023	ND	2.07	103	2.00	3.28		
Toluene*	<0.050	0.050	02/03/2023	ND	2.11	105	2.00	3.47		
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	4.09		
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.33	106	6.00	4.40		
Total BTEX	<0.300	0.300	02/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	02/02/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	244	122	200	4.41	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	213	106	200	5.34	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 70.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	02/02/2023	Sampling Date:	01/30/2023
Reported:	02/06/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: TH - 6/3 (H230466-13)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2023	ND	2.07	103	2.00	3.28		
Toluene*	<0.050	0.050	02/03/2023	ND	2.11	105	2.00	3.47		
Ethylbenzene*	<0.050	0.050	02/03/2023	ND	2.05	103	2.00	4.09		
Total Xylenes*	<0.150	0.150	02/03/2023	ND	6.33	106	6.00	4.40		
Total BTEx	<0.300	0.300	02/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	02/02/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2023	ND	244	122	200	4.41	
DRO >C10-C28*	<10.0	10.0	02/02/2023	ND	213	106	200	5.34	
EXT DRO >C28-C36	<10.0	10.0	02/02/2023	ND					

Surrogate: 1-Chlorooctane 69.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.4 % 49.1-148

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### Notes and Definitions

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

---

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A handwritten signature in cursive script, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ranger Environmental Services, LLC						P.O. #:						BILL TO						ANALYSIS REQUEST					
Project Manager: Will Kierdorf						Company: Silverback Exploration																	
Address: PO Box 201179						Attn: Mark Ritchie																	
City: Austin State: TX Zip: 78720						Address: 108 S. 4th St.																	
Phone #: 512-335-1785 Fax #: 512-335-0527						City: Artesia																	
Project #: 6684 Project Owner:						State: NM Zip: 88211																	
Project Location: Shuddle 27 CTB						Phone #: 713-553-8320																	
Fax #:																							
Sample Name: Will Kennedy						PRESERV.						SAMPLING											
FOR LAB USE ONLY																							
Lab I.D. Sample I.D.						(G)RAB OR (C)OMP.						# CONTAINERS											
						GROUNDWATER						WASTEWATER											
						SOIL						OIL											
						SLUDGE						OTHER :											
						ACID/BASE:						ICE / COOL											
						OTHER :																	
						DATE						TIME											
TH-1/1						G 1						X						TPH (8015)					
TH-1/4						G 1						X						BTEx (8021)					
TH-2/3						G 1						X						Chloride (SM 4500)					
TH-2/4						G 1						X											
TH-3/1						G 1						X											
TH-3/2						G 1						X											
TH-3/4						G 1						X											
TH-4/1						G 1						X											
TH-4/4						G 1						X											
TH-5/3						G 1						X											
TH-5/4						G 1						X											
TH-6/1						G 1						X											
TH-6/3						G 1						X											
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Relinquished By: [Signature]						Date: 2/2/23						Received By: [Signature]											
Time: 11:30																							
Date: [Blank]																							
Time: 1305																							
Delivered By: (Circle One) 3.2 c/jc-o-o						Sample Condition Cool Intact Yes Yes No No						CHECKED BY: [Signature]											
Sample ID: 2.0 = #113																							
Standard TAT																							
Please email lab report to Will@RangerEnv.com																							



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

March 29, 2023

WILL KIERDORF

RANGER ENVIRONMENTAL SERVICES, INC.

PO BOX 201179

AUSTIN, TX 78729

RE: SHUDDE 27 CTB

Enclosed are the results of analyses for samples received by the laboratory on 03/22/23 11:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: W - 1 (H231327-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.09	105	2.00	2.60	
Toluene*	<0.050	0.050	03/27/2023	ND	2.12	106	2.00	2.15	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.22	111	2.00	2.71	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.82	114	6.00	2.90	
Total BTEX	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	03/28/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 96.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.0 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: W - 2 (H231327-02)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.09	105	2.00	2.60		
Toluene*	<0.050	0.050	03/27/2023	ND	2.12	106	2.00	2.15		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.22	111	2.00	2.71		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.82	114	6.00	2.90		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	372	16.0	03/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 93.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: W - 3 (H231327-03)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.09	105	2.00	2.60		
Toluene*	<0.050	0.050	03/27/2023	ND	2.12	106	2.00	2.15		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.22	111	2.00	2.71		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.82	114	6.00	2.90		
Total BTX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/28/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 79.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: W - 4 (H231327-04)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.09	105	2.00	2.60		
Toluene*	<0.050	0.050	03/27/2023	ND	2.12	106	2.00	2.15		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.22	111	2.00	2.71		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.82	114	6.00	2.90		
Total BTX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	03/28/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 91.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: W - 5 (H231327-05)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.09	105	2.00	2.60		
Toluene*	<0.050	0.050	03/27/2023	ND	2.12	106	2.00	2.15		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.22	111	2.00	2.71		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.82	114	6.00	2.90		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	03/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 91.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: W - 6 (H231327-06)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.09	105	2.00	2.60		
Toluene*	<0.050	0.050	03/27/2023	ND	2.12	106	2.00	2.15		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.22	111	2.00	2.71		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.82	114	6.00	2.90		
Total BTEx	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	03/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 84.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: W - 7 (H231327-07)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.09	105	2.00	2.60	
Toluene*	<0.050	0.050	03/27/2023	ND	2.12	106	2.00	2.15	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.22	111	2.00	2.71	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.82	114	6.00	2.90	
Total BTX	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	03/28/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 74.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 75.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: W - 8 (H231327-08)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.09	105	2.00	2.60		
Toluene*	<0.050	0.050	03/27/2023	ND	2.12	106	2.00	2.15		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.22	111	2.00	2.71		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.82	114	6.00	2.90		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	03/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 81.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: W - 9 (H231327-09)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.09	105	2.00	2.60		
Toluene*	<0.050	0.050	03/27/2023	ND	2.12	106	2.00	2.15		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.22	111	2.00	2.71		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.82	114	6.00	2.90		
Total BTEx	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	03/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 79.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 79.6 % 49.1-148

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 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: W - 10 (H231327-10)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.09	105	2.00	2.60	
Toluene*	<0.050	0.050	03/27/2023	ND	2.12	106	2.00	2.15	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.22	111	2.00	2.71	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.82	114	6.00	2.90	
Total BTEx	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	03/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 84.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.1 % 49.1-148

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 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 1 (H231327-11)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1260	16.0	03/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 93.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.4 % 49.1-148

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 WILL KIERDORF  
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 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 2 (H231327-12)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3	
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22	
Total BTEx	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	03/28/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 91.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.2 % 49.1-148

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 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 3 (H231327-13)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3	
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22	
Total BTEx	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1220	16.0	03/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 97.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.2 % 49.1-148

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 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 4 (H231327-14)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3	
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22	
Total BTEx	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2120	16.0	03/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 5 (H231327-15)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3	
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22	
Total BTEx	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	03/28/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 84.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.9 % 49.1-148

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 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 6 (H231327-16)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3	
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22	
Total BTEX	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	03/28/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 78.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.6 % 49.1-148

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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 7 (H231327-17)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3	
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22	
Total BTEx	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/28/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 69.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 68.9 % 49.1-148

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 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 8 (H231327-18)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3	
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22	
Total BTEX	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	03/28/2023	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 81.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.7 % 49.1-148

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 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 9 (H231327-19)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3	
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22	
Total BTEX	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 10 (H231327-20)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22		
Total BTEx	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	208	104	200	2.15	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	210	105	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 11 (H231327-21)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	03/28/2023	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 78.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.1 % 49.1-148

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 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 12 (H231327-22)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22		
Total BTEx	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 68.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 68.8 % 49.1-148

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RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 13 (H231327-23)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 65.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 67.6 % 49.1-148

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RANGER ENVIRONMENTAL SERVICES, INC.  
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 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 14 (H231327-24)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 68.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 70.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 15 (H231327-25)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 75.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 16 (H231327-26)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 81.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.3 % 49.1-148

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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 17 (H231327-27)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 73.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.8 % 49.1-148

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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 18 (H231327-28)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22		
Total BTEx	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1140	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 77.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.4 % 49.1-148

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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 19 (H231327-29)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/27/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.25	104	6.00	7.22		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	800	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 64.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 67.1 % 49.1-148

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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 20 (H231327-30)**

BTX 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	12.3		
Toluene*	<0.050	0.050	03/28/2023	ND	2.05	102	2.00	9.52		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.05	103	2.00	7.61		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.25	104	6.00	7.22		
Total BTX	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 65.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 67.2 % 49.1-148

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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 21 (H231327-31)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439	QR-03	
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTX	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1720	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 82.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.5 % 49.1-148

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 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 22 (H231327-32)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEX	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1170	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 88.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.7 % 49.1-148

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 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 23 (H231327-33)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEx	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	864	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 74.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.6 % 49.1-148

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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 24 (H231327-34)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEx	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	912	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 74.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.2 % 49.1-148

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 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 25 (H231327-35)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEx	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1220	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 75.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.7 % 49.1-148

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 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 26 (H231327-36)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEx	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	720	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 80.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.6 % 49.1-148

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 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 27 (H231327-37)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEx	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1650	16.0	03/28/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 76.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.3 % 49.1-148

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 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 28 (H231327-38)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEX	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1460	16.0	03/28/2023	ND	416	104	400	3.77	QM-07	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 71.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 75.7 % 49.1-148

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 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 29 (H231327-39)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEX	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	912	16.0	03/28/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 70.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 73.7 % 49.1-148

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 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 30 (H231327-40)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEx	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	03/28/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/28/2023	ND	197	98.6	200	2.14	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	183	91.5	200	0.736	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 75.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.7 % 49.1-148

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 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 31 (H231327-41)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTX	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	768	16.0	03/28/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/27/2023	ND	191	95.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	03/27/2023	ND	185	92.4	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 94.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 32 (H231327-42)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEx	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	768	16.0	03/28/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/27/2023	ND	191	95.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	03/27/2023	ND	185	92.4	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 78.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 33 (H231327-43)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEx	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	288	16.0	03/28/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/27/2023	ND	191	95.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	03/27/2023	ND	185	92.4	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 86.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 34 (H231327-44)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTEX	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	432	16.0	03/28/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/27/2023	ND	191	95.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	03/27/2023	ND	185	92.4	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 77.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	03/22/2023	Sampling Date:	03/21/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	SHUDE 27 CTB	Sampling Condition:	Cool & Intact
Project Number:	6684	Sample Received By:	Shalyn Rodriguez
Project Location:	SILVERBACK EXPL. - ROOSEVELT CO NM		

**Sample ID: B - 35 (H231327-45)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/28/2023	ND	2.01	100	2.00	0.439		
Toluene*	<0.050	0.050	03/28/2023	ND	2.04	102	2.00	0.588		
Ethylbenzene*	<0.050	0.050	03/28/2023	ND	2.12	106	2.00	0.201		
Total Xylenes*	<0.150	0.150	03/28/2023	ND	6.49	108	6.00	1.07		
Total BTX	<0.300	0.300	03/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	496	16.0	03/28/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/27/2023	ND	191	95.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	03/27/2023	ND	185	92.4	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 88.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.8 % 49.1-148

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### Notes and Definitions

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

---

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A handwritten signature in cursive script, appearing to read "C. D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager





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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> Ranger Environmental Services, Inc. <b>Project Manager:</b> Will Kierdorf <b>Address:</b> PO Box 201179 <b>City:</b> Austin <b>State:</b> TX <b>Zip:</b> 78720 <b>Phone #:</b> 512-497-1556 <b>Fax #:</b> 512-335-0527 <b>Project #:</b> 6684 <b>Project Name:</b> Shudde 27 CTB <b>Project Location:</b> Shudde 27 CTB <b>Sampler Name:</b> J. Martinez		<b>BILL TO</b> <b>P.O. #:</b> <b>Company:</b> Silverback Exploration <b>Attn:</b> Mark Ritchie <b>Address:</b> 108 S. 4th St. <b>City:</b> Artesia <b>State:</b> NM <b>Zip:</b> 88211 <b>Phone #:</b> 210-874-2406 <b>Fax #:</b>	
<b>FOR LAB USE ONLY</b>			
<b>Lab I.D.</b> #231327	<b>Sample I.D.</b> W-1 W-2 W-3 W-4 W-5 W-6 W-7 W-8 W-9 W-10 B-1 B-2 B-3	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :	MATRIX PRESERV. SAMPLING DATE TIME
1 2 3 4 5 6 7 8 9 10 11 12 13		G 1 G 1 G 1 G 1 G 1 G 1 G 1 G 1 G 1 G 1 G 1 G 1 G 1	X X X X X X X X X X X X X
3-21-23 1118 3-21-23 1120 3-21-23 1122 3-21-23 1124 3-21-23 1126 3-21-23 1128 3-21-23 1130 3-21-23 1132 3-21-23 1134 3-21-23 1136 3-21-23 1230 3-21-23 1232 3-21-23 1234		X X	TPH: (8015) EXT BTEX (8021B) Chloride (SM 4500)
ANALYSIS REQUEST			

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**Relinquished By:** *[Signature]* **Date:** 3-22-23  
**Received By:** *[Signature]* **Date:** 3-22-23  
**Time:** 1140  
**Relinquished By:** R 2.0  
**Received By:** *[Signature]*  
**Time:**  
**Phone Result:** ☐ Yes ☐ No **Add'l Phone #:**  
**Fax Result:** ☐ Yes ☐ No **Add'l Fax #:**  
**REMARKS:**

Delivered By: (Circle One) 2-21-C.O. 102	Sample Condition Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) SR
Sampler - UPS - Bus - Other: 2-21-C.O. 102 #113		

s. Please fax written changes to 575-393-2476

FORM-006 R 2.0

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

**Company Name:** Ranger Environmental Services, Inc.

**Project Manager:** Will Kierdorf

Address: PO Box 201179

City: Austin

Phone #: 512-497-1556

Project #: 6684

**Project Name:** Shudde 27 CTB

Project Location: Shudde 27 CTB

**Sampler Name:** J. Martinez

FOR LAB USE ONLY

	Lab I.D.
	<b>Sample I.D.</b>

4231327

**Relinquished By:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Received By:** \_\_\_\_\_

Relinquished By:

Date: 7-29-72

Time:

Date:

Time:

Received By:

2

Received By:

ANALYSIS REQUEST

Page 50 of 54

Delivered By: (Circle One) <u>2-2i</u> <u>C-O-0i</u>	Sample Condition	CHECKED BY:
Sampler - UPS - Bus - Other: <u>1.0i</u> # <u>113</u>	Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(Initials) <u>SR</u>

s. Please fax written changes to 575-393-2476

FORM-006 R 2.0





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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ranger Environmental Services, Inc.		<b>BILL TO</b>		P.O. #:		ANALYSIS REQUEST																		
Project Manager: Will Klendorf		Address: PO Box 201179		Company: Silverback Exploration																				
City: Austin		State: TX Zip: 78720		Attn: Mark Ritchie																				
Phone #: 512-497-1556		Fax #: 512-335-0527		Address: 108 S. 4th St.																				
Project #: 6684		Project Owner:		City: Artesia																				
Project Name: Shudde 27 CTB		State: NM Zip: 88211		Phone #: 210-874-2406																				
Project Location: Shudde 27 CTB		Fax #:																						
Sampler Name: J. Martinez																								
FOR LAB USE ONLY																								
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX				PRESERV.	SAMPLING	DATE	TIME	TPH: (8015) EXT	BTEX (8021B)	Chloride (SM 4500)										
H231327	B-17	G	1	X						3-21-23	1302	X	X	X										
27	B-18	G	1	X						3-21-23	1400	X	X	X										
28	B-19	G	1	X						3-21-23	1402	X	X	X										
29	B-20	G	1	X						3-21-23	1404	X	X	X										
30	B-21	G	1	X						3-21-23	1406	X	X	X										
31	B-22	G	1	X						3-21-23	1408	X	X	X										
32	B-23	G	1	X						3-21-23	1410	X	X	X										
33	B-24	G	1	X						3-21-23	1412	X	X	X										
34	B-25	G	1	X						3-21-23	1414	X	X	X										
35	B-26	G	1	X						3-21-23	1416	X	X	X										
36	B-27	G	1	X						3-21-23	1418	X	X	X										
37	B-28	G	1	X						3-21-23	1420	X	X	X										
38	B-29	G	1	X						3-21-23	1422	X	X	X										
39																								

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Relinquished By: *[Signature]* Date: 3-22-23 Received By: *[Signature]* Date: 3-22-23

Relinquished By: R 2.0 Time: 11:40 Received By: *[Signature]* Time: 11:40

Phone Result: ☐ Yes ☐ No Add'l Phone #:   
Fax Result: ☐ Yes ☐ No Add'l Fax #:   
REMARKS:





Delivered By: (Circle One) 2.26) c-o-u	Sample Condition Cool <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) SR
Sampler - UPS - Bus - Other: 1.6: #113		

s. Please fax written changes to 575-393-2476

FORM-006 R 2.0

## ATTACHMENT 4

NMOCD CORRESPONDENCE

## Silverback Confirmation Samples 3/21/23

External



Inbox x



**Mark Ritchie**

3:48 PM (27 minutes ago)



to Mike,, me ▾

Mr. Bratcher, please be advised that we will be taking confirmation samples next Tuesday 3/21/23 in pursuit of closure for incidents nAPP2302538491 and nAPP2302541490 at the Shudde 27 CTB facility.

Respectfully,  
Mark Ritchie

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**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 207688

CONDITIONS

Operator: Silverback Operating II, LLC 19707 IH10 West, Suite 201 San Antonio, TX 78256	OGRID: 330968
	Action Number: 207688
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2302541480 SHUDDE 27 CTB, thank you. This closure is approved.	8/31/2023