**Received by OCD: 11/1/2023 1:09:31 PM** Form C-141 State of New Mexico

Oil Conservation Division

|                | 1 450 1 0/ 1.  |
|----------------|----------------|
| Incident ID    | nAPP2317136603 |
| District RP    |                |
| Facility ID    |                |
| Application ID |                |

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## Site Assessment/Characterization

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

| What is the shallowest depth to groundwater beneath the area affected by the release?   | <u>&gt;55</u> (ft bgs) |
|---|------------------------|
| Did this release impact groundwater or surface water?   | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?   | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 300 feet of a wetland?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release overlying a subsurface mine?   | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release overlying an unstable area such as karst geology?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within a 100-year floodplain?  | 🗌 Yes 🛛 No             |
| Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?  | 🗌 Yes 🖂 No             |

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- $\square$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-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.

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|--|-----------------------------------|---|---|---|
|  |                                   |   | Incident ID   | nAPP2317136603  |
| Page 4   | Oil Conservation Division         |   | District RP   |   |
|  |                                   |   | Facility ID   |   |
|  |                                   |   | Application ID  |   |
| regulations all operators are red<br>public health or the environmen<br>failed to adequately investigate<br>addition, OCD acceptance of a<br>and/or regulations. |                                   | Effications and perform c<br>OCD does not relieve th<br>eat to groundwater, surf<br>f responsibility for comp<br> | orrective actions for rele<br>e operator of liability sh<br>ace water, human health | eases which may endanger<br>ould their operations have<br>a or the environment. In<br>deral, state, or local laws |
| OCD Only<br>Received by: <u>Shelly Wells</u>   |                                   | Date: <u>11/1/</u>  | 2023  |   |
|  |                                   |   |   |   |

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<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

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|----------------|----------------|
| District RP    |                |
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## **Remediation Plan**

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points  $\boxtimes$ Estimated volume of material to be remediated  $\bowtie$ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Title: <u>Env. Professional</u> Printed Name: Dale Woodall Signature: Dale Woodall \_\_\_\_\_ Date: \_\_\_\_\_11/1/2023 email: <u>dale.woodall@dvn.com</u>\_\_\_\_\_ Telephone: <u>575-748-1838</u> OCD Only Received by: Shelly Wells Date: 11/1/2023 Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:

**Environmental Site Remediation Work Plan** 



#### **General Information**

| NMOCD District: | District 2                          | Incident ID:         | nAPP2317136603                 |
|-----------------|-------------------------------------|----------------------|--------------------------------|
| Landowner:      | Federal                             | <b>RP Reference:</b> | N/A                            |
| Client:         | Devon Energy Production Company, LP | Site Location:       | Hackberry 18 Federal 2 Battery |
| Date:           | September 15, 2023                  | Project #:           | 23E-03903                      |
| Client Contact: | Dale Woodall                        | Phone #:             | 405.318.4697                   |
| Vertex PM:      | Kent Stallings                      | Phone #:             | 346.814.1413                   |

#### Objective

The objective of the environmental remediation work plan is to identify exceedances found during the site assessment and characterization activity and propose an appropriate remediation technique to address these areas. Areas of environmental concern identified and delineated include along the northwest edge of the pad and off the pad of the Hackberry 18 Federal 2 Battery. The incident occurred when a 3-inch poly line developed a pin hole and ruptured, releasing 8.8 barrels (bbls) of produced water onto the northwest side of the pad and off-site; 1 bbls was recovered. Closure criteria have been selected as per New Mexico Administrative Code (NMAC) 19.15.29. All applicable research as it pertains to closure criteria selection, including reference well CP-01907 POD 1, is presented in Attachment 1. The closure criteria for the site on-pad are presented below in Table 1.

| Table 1. Closure Criteria for Soils Impacted by a Release                                  |                   |              |  |  |
|--|-------------------|--------------|--|--|
| Minimum depth below any point within the horizontal boundary of the release to groundwater |                   |              |  |  |
| less than 10,000 mg/l TDS  | Constituent       | Limit        |  |  |
|  | Chloride          | 10,000 mg/kg |  |  |
|  | TPH (GRO+DRO+MRO) | 2,500 mg/kg  |  |  |
| 51 feet - 100 feet   | GRO+DRO           | 1,000 mg/kg  |  |  |
|  | BTEX              | 50 mg/kg     |  |  |
|  | Benzene           | 10 mg/kg     |  |  |

TDS – Total dissolved solids

TPH – Total petroleum hydrocarbons = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO) BTEX – Benzene, toluene, ethylbenzene, and xylenes

The closure criteria for the site off-pad are presented below in Table 2.

| Table 2. Closure Criteria for Soils to Remediation & Reclamation Standards |                   |              |  |
|--|-------------------|--------------|--|
|  | Constituent       | Limit        |  |
| 0.4 foot bgs (10.15.20.12)   | Chloride          | 600 mg/kg    |  |
| 0-4 feet bgs (19.15.29.13)   | TPH (GRO+DRO+MRO) | 100 mg/kg    |  |
|  | Chloride          | 10,000 mg/kg |  |
|  | TPH (GRO+DRO+MRO) | 2,500 mg/kg  |  |
| DTGW 51-100 feet (19.15.29.12)   | GRO+DRO           | 1,000 mg/kg  |  |
|  | BTEX              | 50 mg/kg     |  |
|  | Benzene           | 10 mg/kg     |  |

bgs – Below ground surface

DTGW – Depth to groundwater

TPH – Total petroleum hydrocarbons = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO)

BTEX – Benzene, toluene, ethylbenzene, and xylenes

#### Site Assessment/Characterization

Site characterization was compared to the strictest criteria as per NMAC 19.15.2 and completed on August 20, 2023. A total of 22 sample points were established and 47 samples collected for field screening. All 47 samples, including at the deepest vertical distance below closure criteria, were submitted to the laboratory for analysis. Samples were submitted to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico, for analysis. The sample locations are presented in Attachment 2. Laboratory analysis results have been compared to the above noted closure criteria and the results from the characterization activity are presented in Attachment 3. Exceedances are identified in the table as bold with a grey background and bold with a green background for off-pad criteria.

#### **Remedial Activities**

#### General

Areas identified with contaminant concentrations above closure criteria will be remediated through excavation. Laboratory results from the site assessment and characterization have been referenced to estimate both the vertical and horizontal limits of the impacts and the volume of soil to be removed. Soil will be excavated to the extents of the known contamination. Field screening will be utilized to confirm removal of contaminated soil below the applicable closure criteria. Contaminated soils will be stored on a 30mil liner prior to disposal at an approved facility. Once excavation is complete, confirmatory samples will be collected and laboratory analysis completed to confirm closure criteria guidelines are met. Excavations will be backfilled with clean soil sourced locally.

#### nAPP2317136603 (06-19-2023) - Release from Poly Line along Edge of Pad

A total of 22 sample points were established for analysis along the north and northwest edge of the pad and off the pad. Exceedances to closure criteria were found at sample points BH23-12, BH23-13, BH23-18 above 2 feet and at BH23-19 at 2 feet. A 0.5 foot scrape will be completed around BH23-12 and BH23-13 to address staining. The sample locations and proposed excavation locations are presented in Attachment 2. Heavy equipment will be used to complete excavation in open areas and hand crews will be used to complete excavation next to equipment or lines that is deemed unsafe. A hydrovac truck will be utilized to identify any lines that may be within the area of contaminated soil in close proximity to lines. Confirmatory samples, including discrete sampling in the scraped, stained areas, will be collected as per New Mexico Oil Conservation Division guidance and submitted for laboratory analysis of all applicable parameters. The estimated volume to be excavated is approximately **217 cubic yards.** 

#### **Environmental Site Remediation Work Plan**

| Sample Point             | Excavation Depth | Remediation Method |
|--------------------------|------------------|--------------------|
| BH23-12                  | 1'-2'            | Backhoe/Handcrew   |
| BH23-13                  | 1'-2'            | Backhoe/Handcrew   |
| BH23-18                  | 1'-2'            | Backhoe            |
| BH23-19                  | 3'               | Backhoe            |
| Around BH23-12 & BH23-13 | 0.5'             | Backhoe            |

Should you have any questions or concerns, please do not hesitate to contact the Kent Stallings at 346.814.1413 or kstallings@vertex.ca.

Stephanie McCarty

Stephanie McCarty, B.Sc.

September 15, 2023 Date

Kent Stallings P.G.

Kent Stallings, P.G. PROJECT MANAGER, REPORT REVIEW \_\_\_\_September 15, 2023\_\_\_\_\_\_

Date

#### Attachments

Attachment 1. Closure Criteria Research

Attachment 2. Characterization Sampling and Proposed Excavation Site Schematic

Attachment 3. Laboratory Results Table and Laboratory Data Reports

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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

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| Incident ID    |  |
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| District RP    |  |
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| Application ID |  |

## **Release Notification**

### **Responsible Party**

| Responsible Party       | OGRID                        |
|-------------------------|------------------------------|
| Contact Name            | Contact Telephone            |
| Contact email           | Incident # (assigned by OCD) |
| Contact mailing address |                              |

### **Location of Release Source**

Longitude

| Latitude |  |  |  |
|----------|--|--|--|
|          |  |  |  |
|          |  |  |  |

| Site Name               | Site Type            |
|-------------------------|----------------------|
| Date Release Discovered | API# (if applicable) |

(NAD 83 in decimal degrees to 5 decimal places)

| Unit Letter | Section | Township | Range | County |
|-------------|---------|----------|-------|--------|
|             |         |          |       |        |

Surface Owner: State Federal Tribal Private (Name: \_

### Nature and Volume of Release

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

| Crude Oil        | Volume Released (bbls)   | Volume Recovered (bbls)                 |
|------------------|--|---|
| Produced Water   | Volume Released (bbls)   | Volume Recovered (bbls)                 |
|                  | Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l? | Yes No                                  |
| Condensate       | Volume Released (bbls)   | Volume Recovered (bbls)                 |
| Natural Gas      | Volume Released (Mcf)  | Volume Recovered (Mcf)                  |
| Other (describe) | Volume/Weight Released (provide units)   | Volume/Weight Recovered (provide units) |
| Cause of Release |  |   |
|                  |  |   |
|                  |  |   |
|                  |  |   |

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| Was this a major<br>release as defined by<br>19.15.29.7(A) NMAC? | If YES, for what reason(s) does the responsible party consider this a major release?  |
|--|---|
| 🗌 Yes 🗌 No   |   |
|  |   |
| If YES, was immediate no   | otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? |
|  |   |

### **Initial Response**

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

The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

| Printed Name: Dale Woodall       | Title: Env. Professional       |
|----------------------------------|--------------------------------|
| Signature: Dale Woodall          | Date:                          |
| email:dale.woodall@dvn.com       | Telephone: <u>575-748-1838</u> |
| OCD Only                         |                                |
| Received by: <u>Shelly Wells</u> | Date: <u>6/23/2023</u>         |

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## Site Assessment/Characterization

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

| What is the shallowest depth to groundwater beneath the area affected by the release?   | <u>&gt;55</u> (ft bgs) |
|---|------------------------|
| Did this release impact groundwater or surface water?   | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?   | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within 300 feet of a wetland?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release overlying a subsurface mine?   | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release overlying an unstable area such as karst geology?  | 🗌 Yes 🛛 No             |
| Are the lateral extents of the release within a 100-year floodplain?  | 🗌 Yes 🛛 No             |
| Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?  | 🗌 Yes 🔀 No             |

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- $\boxtimes$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-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.

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|   |   |  | Application ID   |  |  |  |  |
| regulations all operators<br>public health or the env<br>failed to adequately inva<br>addition, OCD acceptar<br>and/or regulations.<br>Printed Name:<br>Signature: Dalk ( | information given above is true and complete to the<br>s are required to report and/or file certain release not<br>ironment. The acceptance of a C-141 report by the C<br>estigate and remediate contamination that pose a three<br>ince of a C-141 report does not relieve the operator of<br>Dale Woodall<br>Woodall<br>woodall@dvn.com | ifications and perform co<br>DCD does not relieve the<br>eat to groundwater, surfa<br>responsibility for compl<br> | prective actions for rele<br>operator of liability sho<br>ce water, human health | ases which may endanger<br>ould their operations have<br>or the environment. In<br>deral, state, or local laws |  |  |  |
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Oil Conservation Division

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

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| Facility ID    |                |
| Application ID |                |

## **Remediation Plan**

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: \_\_\_\_ Dale Woodall \_\_\_\_\_ Title: \_\_\_\_ Env. Professional \_\_\_\_\_ Signature: Dale Woodall Date: 11/1/2023 Telephone: \_\_\_\_\_ 575-748-1838 email: \_\_\_\_\_ dale.woodall@dvn.com OCD Only Received by: Date: Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:

## **ATTACHMENT 1**

| Closure C | riteria Worksheet   |             |                                   |  |  |
|-----------|---|-------------|-----------------------------------|--|--|
|           | e: Hackberry 18 Fed 2   |             |                                   |  |  |
|           | rdinates: 32.66565861, -103.9104969   |             |                                   |  |  |
| Site Spec | ific Conditions   | Value       | Unit                              |  |  |
| 1         | Depth to Groundwater  | >55         | feet                              |  |  |
| 2         | Within 300 feet of any continuously flowing<br>watercourse or any other significant watercourse   | 7,645       | feet                              |  |  |
| 3         | Within 200 feet of any lakebed, sinkhole or playa lake<br>(measured from the ordinary high-water mark)  | 4,772       |                                   |  |  |
| 4         | Within 300 feet from an occupied residence, school, hospital, institution or church   | 18,007      | feet                              |  |  |
| 5         | <ul> <li>i) Within 500 feet of a spring or a private, domestic</li> <li>fresh water well used by less than five households for</li> <li>domestic or stock watering purposes, or</li> </ul>  | 7,992       | feet                              |  |  |
|           | ii) Within 1000 feet of any fresh water well or spring  |             | feet                              |  |  |
| 6         | Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves | No          | (Y/N)                             |  |  |
| 7         | Within 300 feet of a wetland  | 4,936       | feet                              |  |  |
| 8         | Within the area overlying a subsurface mine   | No          | (Y/N)                             |  |  |
| 9         | Within an unstable area (Karst Map)   | Medium      | Critical<br>High<br>Medium<br>Low |  |  |
| 10        | Within a 100-year Floodplain  | No          | >500 year                         |  |  |
| 11        | Soil Type   | Berino loan | ny fine sand                      |  |  |
| 12        | Ecological Classification   | loamy       |                                   |  |  |
| 13        | Geology   | Qep         |                                   |  |  |
|           | NMAC 19.15.29.12 E (Table 1) Closure Criteria   | 51-100'     | <50'<br>51-100'<br>>100'          |  |  |



## New Mexico Office of the State Engineer Water Column/Average Depth to Water

| (A CLW##### in the<br>POD suffix indicates the<br>POD has been replaced<br>& no longer serves a<br>water right file.) | (R=POD<br>replaced,<br>O=orpha<br>C=the fil<br>closed) | ned,                       | 1            |     |             |   |               |                   | V 2=NE<br>est to la | E 3=SW 4=S<br>urgest) (N | E)<br>JAD83 UTM in n  | neters)             | (In fee    | et)      |             |
|---|--|----------------------------|--------------|-----|-------------|---|---------------|-------------------|---------------------|--------------------------|-----------------------|---------------------|------------|----------|-------------|
| POD Number<br><u>CP 01907 POD1</u>  | Code   | POD<br>Sub-<br>basin<br>CP | County<br>ED | 64  |             | 4 | <b>Sec</b> 18 | <b>Tws</b><br>19S | <b>Rng</b><br>31E   | <b>X</b><br>603017       | <b>Y</b><br>3614737 🍋 | DistanceDept<br>855 | hWellDepth |          | ater<br>umn |
| <u>CP 00873 POD1</u>  |  | СР                         | LE           |     | 1           | 1 | 19            | 19S               | 31E                 | 601772                   | 3613147* 🌍            | 1646                | 340        | 180      | 160         |
| <u>CP 01943 POD1</u>  |  | СР                         | ED           | 1   | 3           | 1 | 20            | 19S               | 31E                 | 603217                   | 3612883 🌍             | 2141                | 55         |          |             |
| <u>CP 00357 POD1</u>  |  | СР                         | ED           | 4   | 4           | 1 | 24            | 19S               | 30E                 | 600667                   | 3612631* 🌍            | 2590                | 630        |          |             |
| <u>CP 00357 POD2</u>  |  | СР                         | ED           | 4   | 3           | 1 | 24            | 19S               | 30E                 | 600265                   | 3612627* 🌑            | 2844                | 630        |          |             |
| <u>CP 00722 POD2</u>  |  | СР                         | ED           | 2   | 1           | 1 | 25            | 19S               | 30E                 | 600276                   | 3611620* 🌍            | 3651                | 350        | 65       | 285         |
| <u>CP 00647 POD1</u>  | 0  | СР                         | ED           | 4   | 2           | 2 | 15            | 19S               | 30E                 | 598235                   | 3614621* 🌍            | 3929                | 200        | 92       | 108         |
| <u>CP 01941 POD1</u>  |  | СР                         | ED           | 3   | 2           | 2 | 29            | 19S               | 31E                 | 604524                   | 3611512 🌍             | 4005                | 55         | 54       | 1           |
| <u>CP 00829 POD1</u>  |  | СР                         | LE           |     | 2           | 4 | 16            | 19S               | 31E                 | 606165                   | 3614009* 🌍            | 4070                | 120        |          |             |
| <u>CP 00822 POD1</u>  |  | СР                         | LE           |     | 4           | 4 | 15            | 19S               | 30E                 | 598148                   | 3613516* 🌍            | 4198                | 90         |          |             |
|   |  |                            |              |     |             |   |               |                   |                     |                          | Avera                 | ge Depth to Water   | :          | 97 feet  |             |
|   |  |                            |              |     |             |   |               |                   |                     |                          |                       | Minimum Dep         | th:        | 54 feet  |             |
|   |  |                            |              |     |             |   |               |                   |                     |                          |                       | Maximum Dept        | h:         | 180 feet |             |
| Record Count: 10  |  |                            |              |     |             |   |               |                   |                     |                          |                       |                     |            |          |             |
| UTMNAD83 Radius   | <u>s Search (in</u>                                    | <u>meters)</u>             | <u>:</u>     |     |             |   |               |                   |                     |                          |                       |                     |            |          |             |
| <b>Easting (X):</b> 602   | 2162   |                            | North        | ing | <b>(Y</b> ) | : | 3614          | 747               |                     |                          | <b>Radius:</b> 5000   |                     |            |          |             |
| *UTM location was derived   | from PLSS -  | - see Help                 |              |     |             |   |               |                   |                     |                          |                       |                     |            |          |             |

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

6/29/23 4:24 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

| N                                | OSE POD NO. (WELL NO.)<br>POD 1 (TW-1)  |         |  |                                  | WELL TAG ID NO.<br>N/A                         |  |  | OSE FILE NO(S).<br>CP-1907   |   |                       |                  |         |  |
|----------------------------------|---|---------|--|----------------------------------|--|--|--|--|---|-----------------------|------------------|---------|--|
| GENERAL AND WELL LOCATION        | WELL OWNER NAME(S)<br>Devon Energy  |         |  |                                  |  |  | PHONE (OPTIONAL)<br>575-748-1838                                     |  |   |                       |                  |         |  |
|                                  | WELL OWNER MAILING ADDRESS<br>6488 7 Rivers Hwy   |         |  |                                  |  |  | CITY<br>Artesia  |  | ST.<br>NN                                   | ате<br>И 88210        | ZIP              |         |  |
|                                  |   |         | degrees minutes seconds<br>32 39 55.76 N |                                  |  | • ACCURACY REQUIRED: ONE TENTH OF A SECOND |  |  |   |                       |                  |         |  |
| <b>IER</b>                       | (FROM GPS)  | LO      | NGITUDE                                  | 103 54 4.95                      |  |  | W  | * DATUM RE   | QUIRED: WGS 84                              |                       |                  |         |  |
| 1. GET                           | DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE<br>SE NE NE Sec. 18 T19S R31S NMPM |         |  |                                  |  |  |  |  |   |                       |                  |         |  |
|                                  | LICENSE NO.<br>1249   |         | NAME OF LICENSED                         | DRILLER<br>Jackie D. Atkins      |  |  | NAME OF WELL DRILLING COMPANY<br>Atkins Engineering Associates, Inc. |  |   |                       |                  |         |  |
| 2. DRILLING & CASING INFORMATION | DRILLING STARTED<br>7/13/2022   |         | DRILLING ENDED<br>7/13/2022              |                                  | H OF COMPLETED WELL (FT)<br>Temporary Well ±55 |  |  | and the second sec | ) DEPTH WATER FIRST ENCOUNTERED (FT)<br>N/A |                       |                  |         |  |
|                                  | COMPLETED W   | ELL IS: | ARTESIAN                                 | T DRY HOLE SHALLOW (UNCONFINED)  |  |  |  | STATIC WATER LEVEL<br>IN COMPLETED WELL N/A 7/13/2022, 7/1/  |   |                       |                  |         |  |
|                                  | DRILLING FLUID: AIR MUD ADDITIVES – SPECIFY:  |         |  |                                  |  |  |  |  |   |                       |                  |         |  |
|                                  | DRILLING METHOD: ROTARY HAMMER CABLE TOOL OTHER - SPECIFY: Hollow Stem Auger  |         |  |                                  |  |  |  |  |   |                       |                  |         |  |
|                                  | DEPTH (feet bgl) BORE HOLE  |         | CASING MATERIAL AND/OR                   |                                  | ASING  | CASING                                     |  | ASING WALL   | SLOT  |                       |                  |         |  |
|                                  | FROM  | то      | DIAM<br>(inches)                         | (include each casing string, and |  | CON  | NECTION<br>TYPE<br>pling diameter)                                   | INSIDE DIAM.<br>(inches)   |   | THICKNESS<br>(inches) | SIZE<br>(inches  |         |  |
|                                  | 0   | 55      | ±6.5                                     | Boring-HSA                       |  |  | -  | -  |   |                       |                  |         |  |
| ILLIN                            |   |         |  |                                  |  |  |  |  | 1   |                       |                  |         |  |
| DRI                              |   | _       |  |                                  |  |  |  |  |   | -                     |                  | -       |  |
| 4                                |   |         | -  |                                  |  |  |  |  |   | -                     |                  |         |  |
|                                  |   |         |  |                                  |  |  |  |  |   |                       |                  |         |  |
|                                  |   | -       |  |                                  |  | -  | _  |  | -   | -                     |                  | -       |  |
|                                  |   |         |  |                                  |  |  |  |  |   |                       | 1                |         |  |
| ANNULAR MATERIAL                 | DEPTH (feet bgl) BORE HOLE  |         |  | LIST ANNULAR SEAL MATERIAL A     |  |  |  |  | AMOUNT                                      |                       | METHOD OF        |         |  |
|                                  | FROM  | то      | DIAM. (inches)                           | GRAVEL PACK SIZE-RANGE BY INTERV |  |  | ERVAL  | RVAL (cubic feet)  |   | PLACEMENT             |                  |         |  |
|                                  |   |         |  |                                  |  |  |  |  |   |                       | 24722-250        |         |  |
| ULAR                             |   |         |  |                                  |  |  |  |  | USC Un                                      | 1200                  | 1 4V44 PM3 (1)   |         |  |
| ANN                              |   |         |  |                                  |  |  |  |  | 1   |                       |                  |         |  |
| э.                               |   |         |  |                                  |  |  |  |  |   |                       |                  |         |  |
| FOR                              | OSE INTERNA   | L USE   |  |                                  |  |  |  | WR-2   | 0 WELL REC                                  | ORD & LO              | OG (Version 01/2 | 8/2022) |  |
|                                  | ENO. CP.  | 19      | 07.702                                   | The                              | -/ POD N                                       | 0.   |  | TRN  | NO. 72                                      | 616                   | ,7               |         |  |
| LOC                              | ATION   | 9.      | 31.18.42                                 | 22                               |  |  |  | WELL TAG I   | d NO. 🚽                                     | +                     | PAGE             | 1 OF 2  |  |

|                              | DEPTH (feet bgl)  |                              | L. S. S.            | COLOR AND TYPE OF MATERIAL ENCOUNTERED -                |   |   |              | WATER     |               | ESTIMATED<br>YIELD FOR           |  |
|------------------------------|---|------------------------------|---------------------|---|---|---|--------------|-----------|---------------|----------------------------------|--|
| 4. HYDROGEOLOGIC LOG OF WELL | FROM  | то                           | THICKNESS<br>(feet) | CKNESS INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES |   |   |              |           | ING?<br>/ NO) | WATER-<br>BEARING<br>ZONES (gpm) |  |
|                              | 0   | 29                           | 29                  | Sand, Medi  | Sand, Medium/ Fine grained, poorly graded, Light brown                      |   |              |           | √ N           |                                  |  |
|                              | 29  | 44                           | 15                  | Sand, Medium/ Fine                                      | Sand, Medium/ Fine grained, poorly graded, with caliche Light brown / white |   |              |           | √N            |                                  |  |
|                              | 44  | 55                           | 11                  | Sand, Medi  | um/ Fine grained, po  | n/ Fine grained, poorly graded, Light brown |              |           | √N            |                                  |  |
|                              |   |                              |                     |   |   |   | Y            | N         |               |                                  |  |
|                              |   | _                            |                     |   |   |   |              | Y         | N             |                                  |  |
|                              |   |                              | 1                   |   |   |   |              | Y         | N             |                                  |  |
|                              |   |                              | 1                   | 1   |   |   |              | Y         | N             |                                  |  |
|                              |   |                              |                     |   |   |   |              | Y         | N             |                                  |  |
|                              |   |                              |                     |   |   |   |              | Y         | N             |                                  |  |
|                              |   |                              | -                   |   |   |   |              | Y         | N             |                                  |  |
|                              |   |                              |                     |   |   |   |              | Y         | N             | 1                                |  |
|                              |   |                              | ·                   |   |   |   |              | Y         | N             |                                  |  |
|                              |   |                              |                     |   |   | -   |              | Y         | N             |                                  |  |
|                              |   |                              |                     |   |   |   |              | Y         | N             |                                  |  |
| 4                            |   | _                            |                     |   |   |   |              | Y         | N             |                                  |  |
|                              |   |                              |                     |   |   |   |              | Y         | N             |                                  |  |
|                              |   |                              |                     |   |   |   |              | Y         | N             |                                  |  |
|                              |   |                              |                     |   |   |   |              | Y         | N             |                                  |  |
|                              |   | _                            |                     |   |   |   |              | Y         | N             | -                                |  |
|                              |   | _                            |                     |   |   |   |              | Y         | N             |                                  |  |
|                              |   |                              |                     |   |   | _   |              | Y         | N             |                                  |  |
|                              | METHOD US   | 107                          |                     | OF WATER-BEARIN   | G STRATA:<br>THER – SPECIFY:  |   |              | TAL ESTIN |               | 0.00                             |  |
| TEST; RIG SUPERVISION        | WELL TEST<br>TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD,<br>START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.   |                              |                     |   |   |   |              |           |               |                                  |  |
|                              | MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface.   |                              |                     |   |   |   |              |           |               |                                  |  |
|                              | PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:   |                              |                     |   |   |   |              |           |               |                                  |  |
| 6                            | Shane Eldridge, Cameron Pruitt  |                              |                     |   |   |   |              |           |               |                                  |  |
| SIGNALUKE                    | THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING: |                              |                     |   |   |   |              |           |               |                                  |  |
| o. SIGN                      | Jack At   | Jack Atkins Jackie D. Atkins |                     |   |   |   |              | 8/4/2022  |               |                                  |  |
| •                            | SIGNATURE OF DRILLER / PRINT SIGNEE NAME  |                              |                     |   |   |   |              | DATE      |               |                                  |  |
| -                            |   | AT LICE                      |                     |   |   |   | WR-20 WELL R | COPD &    | LOCAL         | rsion 01/28/202                  |  |
| -                            |   |                              |                     |   |   |   |              |           |               |                                  |  |
| _                            | E NO.   |                              | 104-F               | 1-110-1   | POD NO.   |   | TRN NO.      | 21-       |               | 7                                |  |

Hackberry 18 Federal 2 Battery

Received by OCD: 11/1/2023 1:09:31 PM

CKBERRY 18 FEDERAL #002

Google Earth

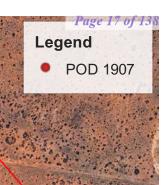
Refeased to Mindging: 3/5/2024 11:07:34

Distance to nearest DTGW reference: 0.5 miles to pad Red radius: 0.5 miles



-aville

POD-1907





## U.S. Fish and Wildlife Service

## National Wetlands Inventory

Page 18 of 138 02 - Hackberry 18 Fed 2 Battery -Watercourse: 7,645 feet away (1.45 miles)



Lake

Other

Riverine

Freshwater Emergent Wetland

**Freshwater Pond** 

Freshwater Forested/Shrub Wetland

#### Wetlands

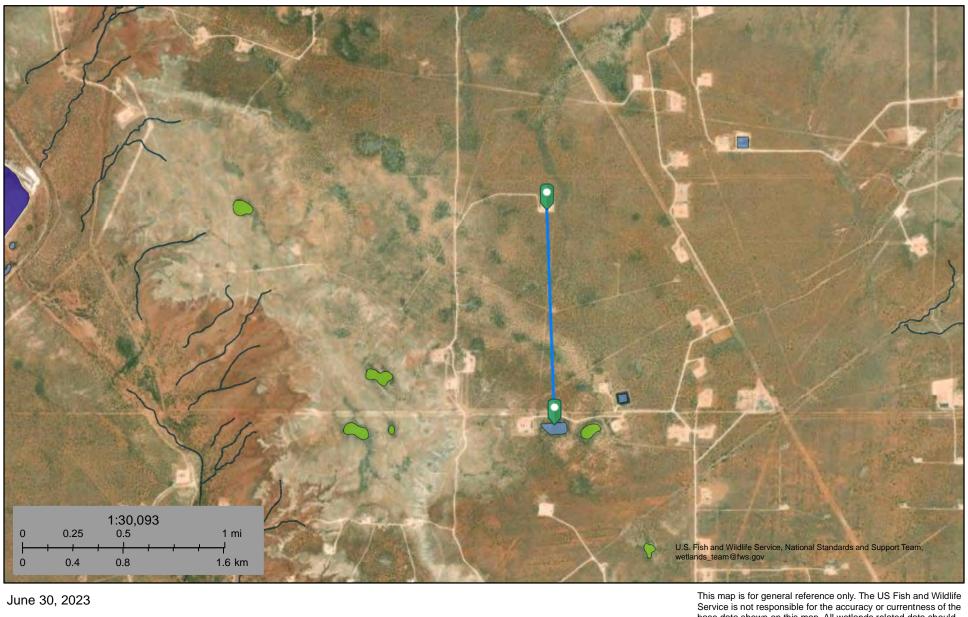
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

Released to Imaging: 3/5/2024 11:07:34 AM

Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

## U.S. Fish and Wildlife Service National Wetlands Inventory

03 - Hackberry 18 Fed 2 Battery -Lakebed: 4,772 feet (0.89 miles)



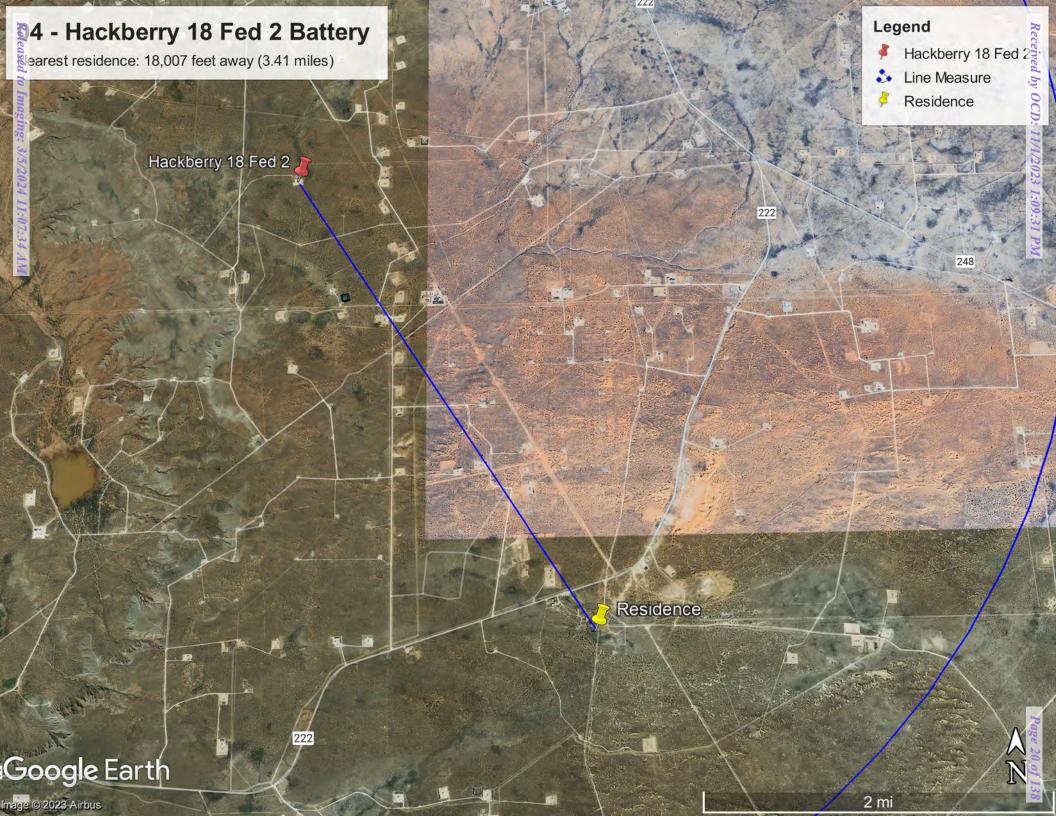
#### Wetlands

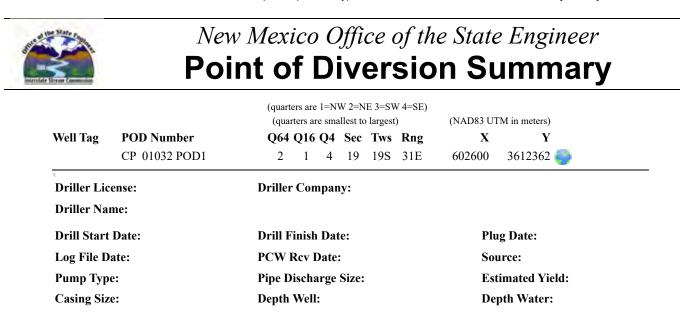
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Forested/Shrub Wetland

Freshwater Emergent Wetland

**Freshwater Pond** 

Lake Other Riverine base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

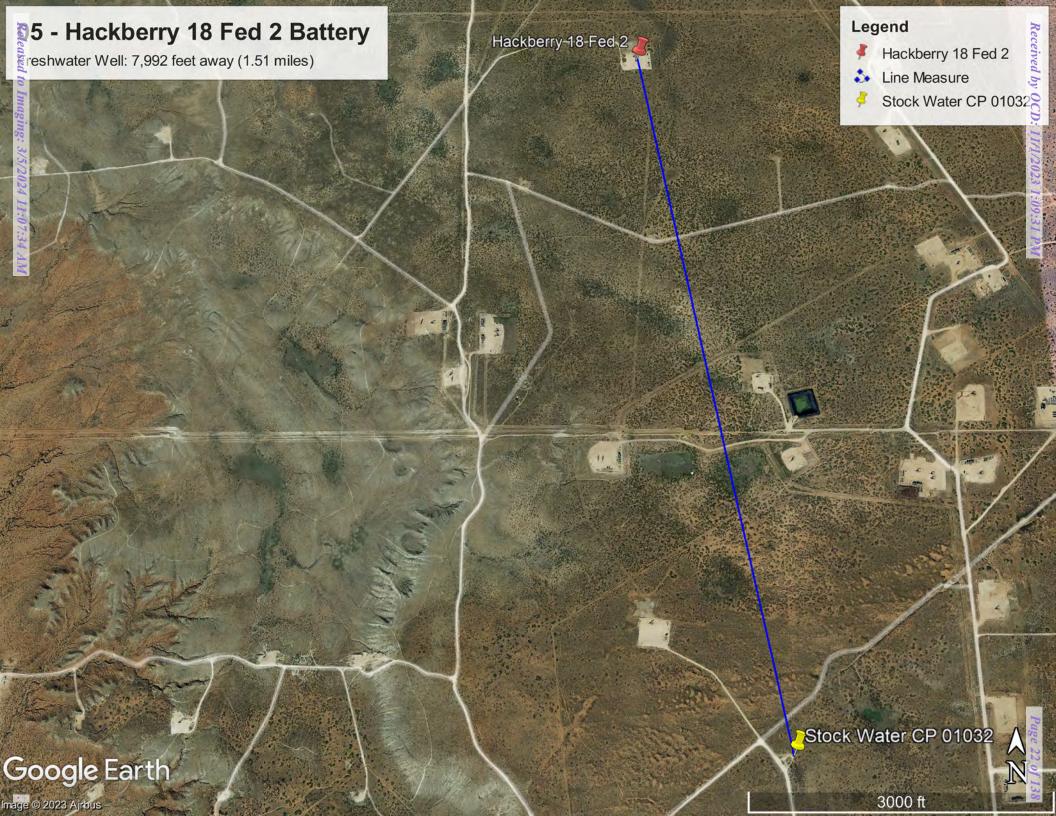




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6/30/23 11:23 AM

POINT OF DIVERSION SUMMARY



## 6 - Hackberry 18 Fed 2 Battery

360

量

Municipality

Loco Hills

earest municipality: 59,335 feet away (11.24 miles)

82)

### Legend

6 mi

Hackberry 18 Fed 2
 Line Measure
 Municipality

Hackberry 18 Fed 2

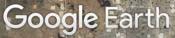
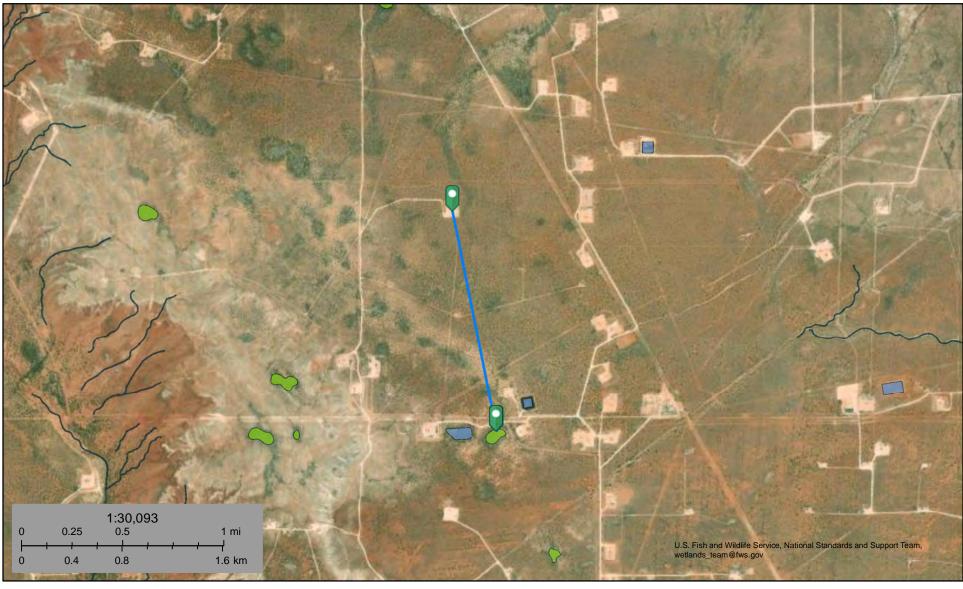


Image © 2023 Airbus

## **U.S. Fish and Wildlife Service**

## National Wetlands Inventory

07 - Hackberry 18 Fed 2 Battery -Wetland: 4,936 feet (0.93 miles)



#### June 30, 2023

#### Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

Released to Imaging: 3/5/2024 11:07:34 AM

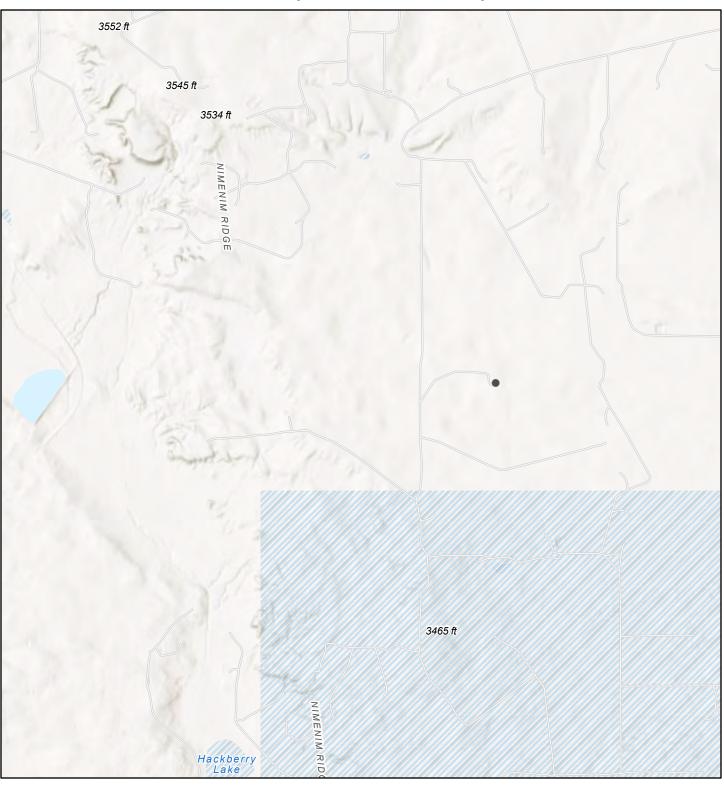
- Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland
- **Freshwater Pond**

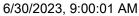
Lake Other Riverine

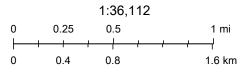
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Received by OCD: 11/1/2023 1:09:31 PM

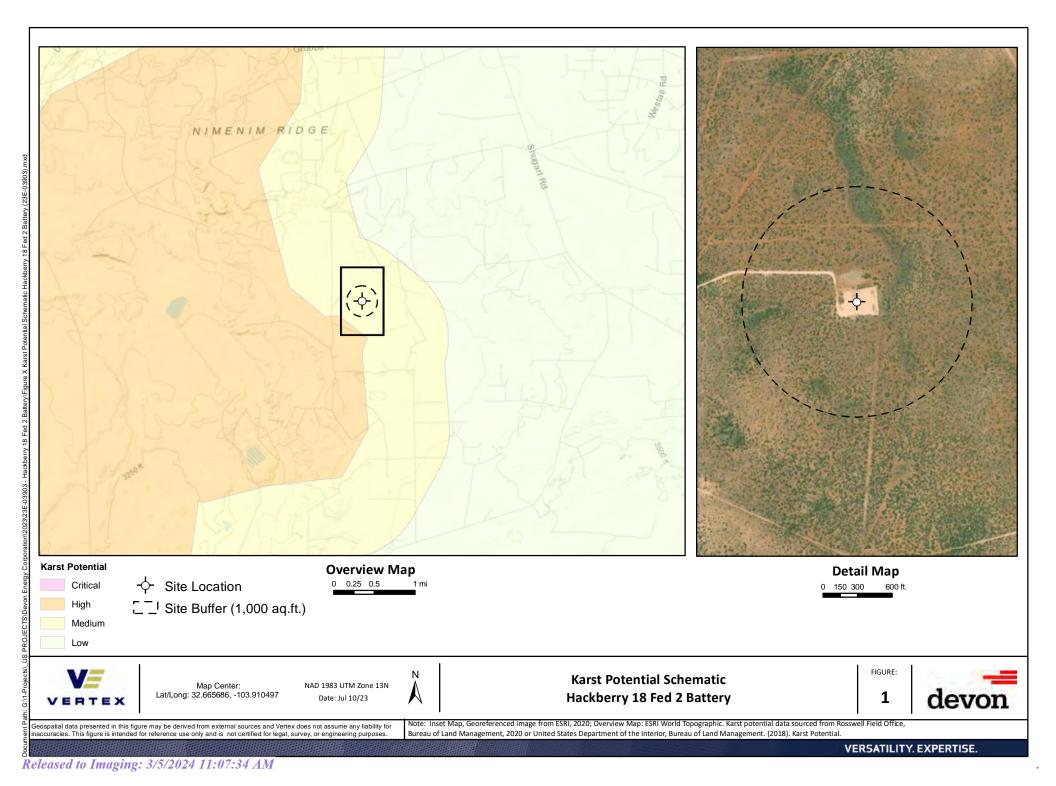
## 08 - Hackberry 18 Fed 2 Battery - Mines







Esri, NASA, NGA, USGS, FEMA, New Mexico State University, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA



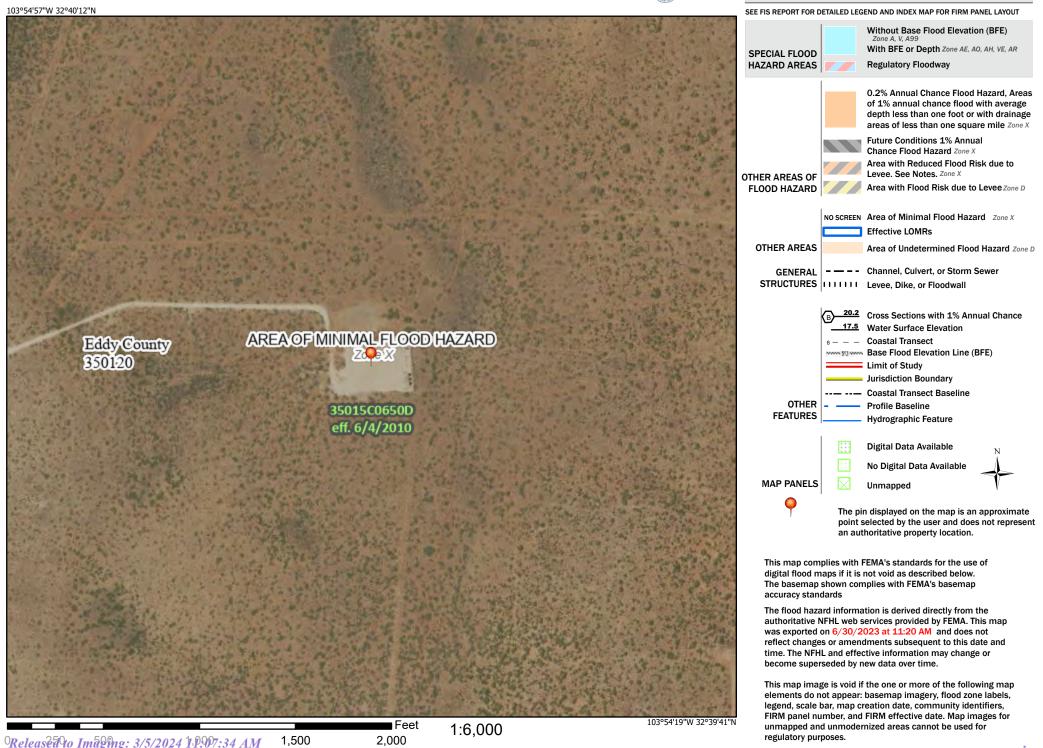
### Received by OCD: 11/1/2023 1:09:31 PM National Flood Hazard Layer FIRMette

Hackberry 18 Fed 2 Battery



## Legend

Page 27 of 138



Basemap Imagery Source: USGS National Map 2023



United States Department of Agriculture

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Eddy Area, New Mexico



# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2\_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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| Legend  |    |
| Map Unit Legend (11 - Hackberry 18 Fed 2 Battery)       |    |
| Map Unit Descriptions (11 - Hackberry 18 Fed 2 Battery) | 11 |
| Eddy Area, New Mexico                                   | 13 |
| BA—Berino loamy fine sand, 0 to 3 percent slopes        |    |
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# **How Soil Surveys Are Made**

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

.

#### Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

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|                     | MAP L   | EGEND | )   | MAP INFORMATION   |
|---------------------|---|-------|---|---|
| Soils               | NAP L<br>Area of Interest (AOI)<br>Soil Map Unit Polygons<br>Soil Map Unit Polygons<br>Soil Map Unit Lines<br>Soil Map Unit Points<br>Soil Map Unit Points<br>Blowout<br>Borrow Pit<br>Clay Spot<br>Clay Spot<br>Closed Depression<br>Gravel Pit<br>Gravel Pit<br>Landfill<br>Lava Flow<br>Marsh or swamp | EGEND | Spoil Area<br>Stony Spot<br>Very Stony Spot<br>Wet Spot<br>Other<br>Special Line Features<br>Streams and Canals<br>Streams and Canals<br>Interstate Highways<br>US Routes<br>Major Roads<br>Local Roads | <b>MAP INFORMATION</b> The soil surveys that comprise your AOI were mapped at 1:20,000.         Warning: Soil Map may not be valid at this scale.         Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.         Please rely on the bar scale on each map sheet for map measurements.         Source of Map: Natural Resources Conservation Service Web Soil Survey URL:         Coordinate System: Web Mercator (EPSG:3857)         Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Abers equal-area conic projection, should be used if more |
| ≪ ◎ ○ > + ∷ ♯ ◇ À ∞ | Mine or Quarry<br>Miscellaneous Water<br>Perennial Water<br>Rock Outcrop<br>Saline Spot<br>Sandy Spot<br>Severely Eroded Spot<br>Sinkhole<br>Slide or Slip<br>Sodic Spot  |       |   | <ul> <li>accurate calculations of distance or area are required.</li> <li>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</li> <li>Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 18, Sep 8, 2022</li> <li>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</li> <li>Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020</li> <li>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</li> </ul>   |

## Map Unit Legend (11 - Hackberry 18 Fed 2 Battery)

| Map Unit Symbol             | Map Unit Name                                 | Acres in AOI | Percent of AOI |
|-----------------------------|---|--------------|----------------|
| BA                          | Berino loamy fine sand, 0 to 3 percent slopes | 29.9         | 100.0%         |
| Totals for Area of Interest |   | 29.9         | 100.0%         |

# Map Unit Descriptions (11 - Hackberry 18 Fed 2 Battery)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Eddy Area, New Mexico

### BA—Berino loamy fine sand, 0 to 3 percent slopes

### **Map Unit Setting**

National map unit symbol: 1w42 Elevation: 2,000 to 5,700 feet Mean annual precipitation: 6 to 14 inches Mean annual air temperature: 57 to 70 degrees F Frost-free period: 180 to 260 days Farmland classification: Not prime farmland

### **Map Unit Composition**

Berino and similar soils: 99 percent Minor components: 1 percent Estimates are based on observations, descriptions, and transects of the mapunit.

### **Description of Berino**

#### Setting

Landform: Plains, fan piedmonts Landform position (three-dimensional): Riser Down-slope shape: Convex Across-slope shape: Linear Parent material: Mixed alluvium and/or eolian sands

#### **Typical profile**

H1 - 0 to 12 inches: loamy fine sand H2 - 12 to 58 inches: sandy clay loam H3 - 58 to 60 inches: clay loam

### **Properties and qualities**

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

### Interpretive groups

Land capability classification (irrigated): 3e Land capability classification (nonirrigated): 7e Hydrologic Soil Group: B Ecological site: R070BC007NM - Loamy Hydric soil rating: No

.

### **Minor Components**

#### Pajarito

Percent of map unit: 1 percent Ecological site: R070BD003NM - Loamy Sand Hydric soil rating: No

# References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/national/soils/?cid=nrcs142p2\_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ home/?cid=nrcs142p2\_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/ detail/national/landuse/rangepasture/?cid=stelprdb1043084

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United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/soils/scientists/?cid=nrcs142p2\_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/? cid=nrcs142p2\_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs142p2\_052290.pdf



United States Department of Agriculture

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Eddy Area, New Mexico



# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2\_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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| Fed 2 Battery)  | 8 |
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# Soil Information for All Uses

# **Ecological Sites**

Individual soil map unit components can be correlated to a particular ecological site. The Ecological Site Assessment section includes ecological site descriptions, plant growth curves, state and transition models, and selected National Plants database information.

## All Ecological Sites — (11 - Hackberry 18 Fed 2 Battery)

An "ecological site" is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. For example, the hydrology of the site is influenced by development of the soil and plant community. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production.

An ecological site name provides a general description of a particular ecological site. For example, "Loamy Upland" is the name of a rangeland ecological site. An "ecological site ID" is the symbol assigned to a particular ecological site.

The map identifies the dominant ecological site for each map unit, aggregated by dominant condition. Other ecological sites may occur within each map unit. Each map unit typically consists of one or more components (soils and/or miscellaneous areas). Each soil component is associated with an ecological site. Miscellaneous areas, such as rock outcrop, sand dunes, and badlands, have little or no soil material and support little or no vegetation and therefore are not linked to an ecological site. The table below the map lists all of the ecological sites for each map unit component in your area of interest.

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| MAP LEGEND                 | MAP INFORMATION   |
|----------------------------|---|
| Area of Interest (AOI)     | The soil surveys that comprise your AOI were mapped at  |
| Area of Interest (AOI)     | 1:20,000.   |
| Soils                      | Warning: Soil Map may not be valid at this scale.   |
| Soil Rating Polygons       | Warning. Soir Map may not be valid at this scale.   |
| R070BC007NM                | Enlargement of maps beyond the scale of mapping can cause   |
| Not rated or not available | misunderstanding of the detail of mapping and accuracy of soil  |
| Soil Rating Lines          | line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed   |
| R070BC007NM                | scale.  |
| Not rated or not available |   |
| Soil Rating Points         | Please rely on the bar scale on each map sheet for map  |
| R070BC007NM                | measurements.   |
| Not rated or not available | Source of Map: Natural Resources Conservation Service   |
| Water Features             | Web Soil Survey URL:  |
| Streams and Canals         | Coordinate System: Web Mercator (EPSG:3857)   |
| Transportation             | Maps from the Web Soil Survey are based on the Web Mercator   |
| +++ Rails                  | projection, which preserves direction and shape but distorts  |
| nterstate Highways         | distance and area. A projection that preserves area, such as the<br>Albers equal-area conic projection, should be used if more  |
| US Routes                  | accurate calculations of distance or area are required.   |
|                            |   |
|                            | This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.   |
| Local Roads                | of the version date(s) listed below.  |
| Background                 | Soil Survey Area: Eddy Area, New Mexico   |
| Aerial Photography         | Survey Area Data: Version 18, Sep 8, 2022   |
|                            | Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.   |
|                            | Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020   |
|                            | The orthophoto or other base map on which the soil lines were<br>compiled and digitized probably differs from the background<br>imagery displayed on these maps. As a result, some minor<br>shifting of map unit boundaries may be evident. |

# Table—Ecological Sites by Map Unit Component (11 - Hackberry 18 Fed 2 Battery)

| Map unit symbol       | Map unit name                     | Component name<br>(percent) | Ecological site             | Acres in AOI | Percent of AOI |
|-----------------------|-----------------------------------|-----------------------------|-----------------------------|--------------|----------------|
| BA                    | Berino loamy fine<br>sand, 0 to 3 | Berino (99%)                | R070BC007NM —<br>Loamy      | 29.9         | 100.0%         |
|                       | percent slopes                    | Pajarito (1%)               | R070BD003NM —<br>Loamy Sand |              |                |
| Totals for Area of In | terest                            | 29.9                        | 100.0%                      |              |                |

# References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/national/soils/?cid=nrcs142p2\_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

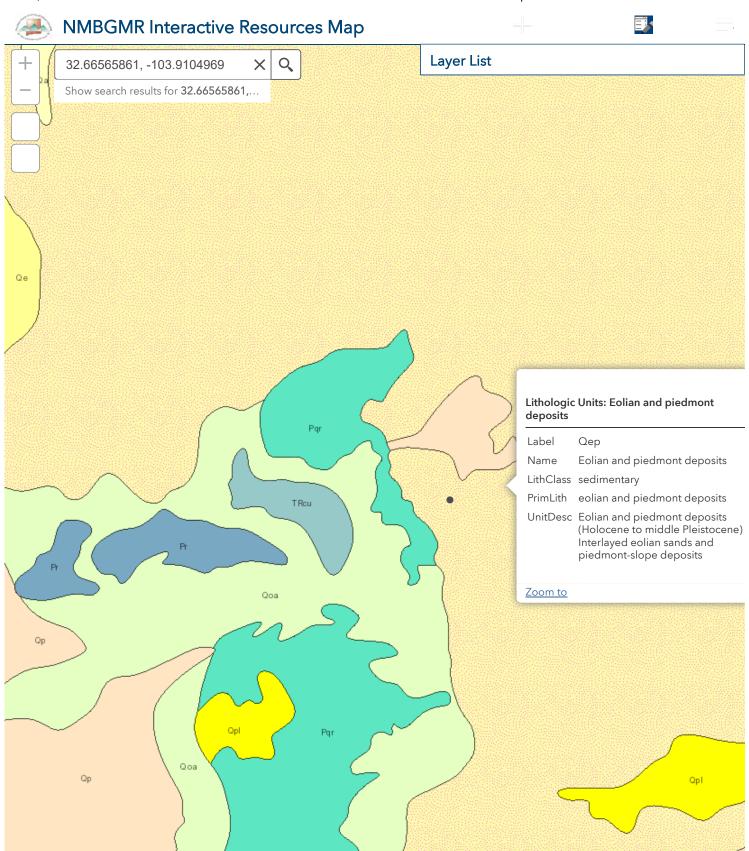
United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ home/?cid=nrcs142p2\_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/ detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/? cid=nrcs142p2\_053624

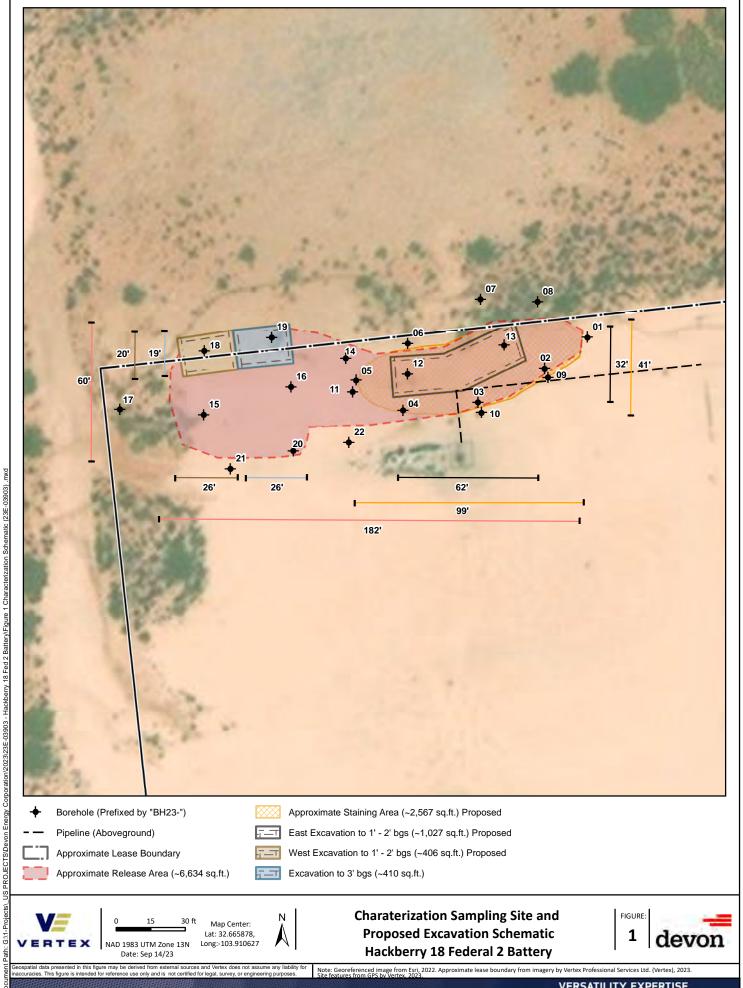
United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs142p2\_052290.pdf



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## **ATTACHMENT 2**



## **ATTACHMENT 3**

Client Name: Devon Energy Production Company, LP Site Name: Hackberry 18 Federal 2 Battery NMOCD Tracking #: nAPP2317136603 Project #: 23E-03903 Lab Reports: 2308F22, 2308F19 and 2308F20

|           | Table         | 3. Initial Characte                | erization S                             | ample Fie                                      | ld Screen                       | creen and Laboratory Results - Depth to Groundwater 51 - 100 feet bgs |  |  |  |   |                        |  |  |
|-----------|---------------|------------------------------------|---|--|---------------------------------|---|--|--|--|---|------------------------|--|--|
| 9         | ample Descrip | otion                              | Fie                                     | eld Screeni                                    | ng                              |   |  | Petrole                                    | eum Hydro                                  | carbons                                   |                        |  |  |
|           |               |                                    |   |  |                                 | Vola  | atile  |  |  | Extractable                               | 5                      |  | Inorganic                              |
| Sample ID | Depth (ft)    | Sample Date                        | 편 Volatile Organic Compounds<br>૩ (PID) | Extractable Organic<br>3 Compounds (PetroFlag) | dd)<br>Montation<br>(Montation) | euseus<br>(mg/kg)   | )<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m<br>m | ଇ Gasoline Range Organics<br>ଅନ୍ଧ<br>(GRO) | କ୍ଷି Diesel Range Organics<br>ଅନୁ<br>(DRO) | କ୍ଷି<br>Motor Oil Range Organics<br>(MRO) | (GRO + DRO)<br>(mg/kg) | କ୍ଷି Total Petroleum<br>କ୍ଷି<br>Hydrocarbons (TPH) | ළ<br>ක්රී Chloride Concentration<br>කි |
| BH23-01   | 0             | August 18, 2023                    | 0                                       | 12   | 0                               | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | ND                                     |
| BH25-01   | 2             | August 18, 2023                    | 0                                       | 7  | 158                             | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 320                                    |
| BH23-02   | 0             | August 18, 2023                    | 0                                       | 245  | 558                             | ND  | ND   | ND   | 21   | ND  | 21                     | 21   | 880                                    |
| 01123-02  | 2             | August 18, 2023                    | 0                                       | 22   | 391                             | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 550                                    |
| BH23-03   | 0             | August 18, 2023                    | 0                                       | -  | 1,568                           | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 2400                                   |
| 51123 03  | 2             | August 18, 2023                    | 0                                       | -  | 336                             | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 430                                    |
| BH23-04   | 0             | August 18, 2023                    | 0                                       | 31   | 655                             | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 1000                                   |
| 51120 01  | 2             | August 18, 2023                    | 0                                       | 13   | 93                              | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 280                                    |
| BH23-05   | 0             | August 18, 2023                    | 0                                       | -  | 3,296                           | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 3500                                   |
|           | 2             | August 18, 2023                    | 0                                       | -  | 1,208                           | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 1400                                   |
| BH23-06   | 0             | August 18, 2023                    | 0                                       | 14   | 216                             | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 260                                    |
|           | 2             | August 18, 2023                    | 0                                       | 0  | 129                             | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 250                                    |
| BH23-07   | 0             | August 18, 2023                    | 0                                       | 33   | 0                               | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | ND                                     |
|           | 2             | August 18, 2023                    | 0                                       | 3  | 0                               | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | ND                                     |
| BH23-08   | 0             | August 18, 2023                    | 0                                       | 90   | 0                               | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | ND                                     |
|           | 2             | August 18, 2023                    | 0                                       | 4  | 0                               | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | ND                                     |
| BH23-09   | 0             | August 19, 2023                    | 0                                       | 31   | 44                              | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 110                                    |
|           | 2             | August 19, 2023                    | 0                                       | 29   | 305                             | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 300                                    |
| BH23-10   | 0             | August 19, 2023                    | 0                                       | 90   | 36                              | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 120                                    |
|           |               | August 19, 2023                    | 0                                       | 30   | 329                             | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 180                                    |
| BH23-11   | 0             | August 19, 2023                    | 0                                       | 72<br>59                                       | 2,085<br>1,258                  | ND<br>ND  | ND<br>ND   | ND<br>ND                                   | ND<br>ND                                   | ND<br>ND                                  | ND<br>ND               | ND<br>ND   | 2300<br>1000                           |
|           | 0             | August 19, 2023<br>August 19, 2023 | 2                                       | 8,100  | 7,376                           | ND  | ND   | ND<br>ND                                   | 2700                                       | 3500                                      | 2700                   | 6200   | 8200                                   |
|           | 2             | August 19, 2023<br>August 19, 2023 | 0                                       | 28   | 311                             | ND  | ND   | ND   | 2700<br>ND                                 | ND  | ND                     | ND   | 300                                    |
| BH23-12   | 3.5           | August 19, 2023                    | 0                                       | 92   | 923                             | ND  | ND   | ND   | 210  | 220                                       | 210                    | 430  | 830                                    |
|           | 4             | August 19, 2023                    | 0                                       | -  | 775                             | ND  | ND   | ND   | 13   | ND  | ND                     | ND   | 540                                    |
|           | 0             | August 19, 2023                    | 14                                      | 6,300  | 8,781                           | ND  | ND   | ND   | 4900                                       | 3700                                      | 4900                   | 8600   | 9200                                   |
| BH23-13   | 1             | August 19, 2023                    | 0                                       | 29   | 443                             | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 320                                    |
|           | 4             | August 19, 2023                    | 0                                       | 43   | 178                             | ND  | ND   | ND   | 12   | ND  | 12                     | 12   | 330                                    |
| DU22 14   | 0             | August 19, 2023                    | -                                       | 35   | 2,827                           | ND  | ND   | ND   | 230  | 180                                       | 230                    | 410  | 2100                                   |
| BH23-14   | 2             | August 19, 2023                    | -                                       | 33   | 3,306                           | ND  | ND   | ND   | 80   | 62  | 80                     | 142  | 2200                                   |
| BH23-15   | 0             | August 20, 2023                    | -                                       | 32   | 0                               | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 84                                     |
| вп23-13   | 2             | August 20, 2023                    | -                                       | 46   | 936                             | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 860                                    |
| BH23-16   | 0             | August 20, 2023                    | -                                       | -  | 821                             | ND  | ND   | ND   | 100  | 140                                       | 100                    | 240  | 1300                                   |
| 525 10    | 2             | August 20, 2023                    | -                                       | -  | 2,433                           | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 1900                                   |
| BH23-17   | 0             | August 20, 2023                    | -                                       | 47   | 0                               | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | ND                                     |
|           | 2             | August 20, 2023                    | -                                       | 22   | 0                               | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | ND                                     |
| BH23-18   | 0             | August 20, 2023                    | -                                       | -  | 5,755                           | ND  | ND   | ND   | 340  | 250                                       | 340                    | 590  | 5000                                   |
|           | 2             | August 20, 2023                    | -                                       | -  | 754                             | ND  | ND   | ND   | ND   | ND  | ND                     | ND   | 550                                    |



Client Name: Devon Energy Production Company, LP Site Name: Hackberry 18 Federal 2 Battery NMOCD Tracking #: nAPP2317136603 Project #: 23E-03903 Lab Reports: 2308F22, 2308F19 and 2308F20

|           | Table 3. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater 51 - 100 feet bgs |                 |                                     |  |                        |         |              |                                  |                                |                                   |             |                                       |                        |
|-----------|---|-----------------|-------------------------------------|--|------------------------|---------|--------------|----------------------------------|--------------------------------|-----------------------------------|-------------|---------------------------------------|------------------------|
| S         | ample Descrip   | otion           | Fi                                  | eld Screeni                                  | ng                     |         |              | Petrole                          | um Hydroc                      | arbons                            |             |                                       |                        |
|           |   |                 |                                     |  |                        | Vola    | atile        |                                  |                                | Extractable                       | 2           |                                       | Inorganic              |
| Sample ID | Depth (ft)  | Sample Date     | Volatile Organic Compounds<br>(PID) | Extractable Organic<br>Compounds (PetroFlag) | Chloride Concentration | Benzene | BTEX (Total) | Gasoline Range Organics<br>(GRO) | Diesel Range Organics<br>(DRO) | Motor Oil Range Organics<br>(MRO) | (GRO + DRO) | Total Petroleum<br>Hydrocarbons (TPH) | Chloride Concentration |
|           |   |                 | (ppm)                               | (ppm)  | (ppm)                  | (mg/kg) | (mg/kg)      | (mg/kg)                          | (mg/kg)                        | (mg/kg)                           | (mg/kg)     | (mg/kg)                               | (mg/kg)                |
| BH23-19   | 0   | August 20, 2023 | -                                   | 79   | 2                      | ND      | ND           | ND                               | ND                             | ND                                | ND          | ND                                    | 200                    |
| BH25 15   | 2   | August 20, 2023 | -                                   | 31   | 826                    | ND      | ND           | ND                               | ND                             | ND                                | ND          | ND                                    | 860                    |
| BH23-20   | 0   | August 20, 2023 | -                                   | -  | 4,624                  | ND      | ND           | ND                               | ND                             | ND                                | ND          | ND                                    | 5000                   |
| BH23-20   | 2   | August 20, 2023 | -                                   | -  | 1,793                  | ND      | ND           | ND                               | ND                             | ND                                | ND          | ND                                    | 1600                   |
| BH23-21   | 0   | August 20, 2023 | -                                   | 14   | 619                    | ND      | ND           | ND                               | ND                             | ND                                | ND          | ND                                    | 540                    |
| DH23-21   | 2   | August 20, 2023 | -                                   | 49   | 411                    | ND      | ND           | ND                               | ND                             | ND                                | ND          | ND                                    | 620                    |
| BH23-22   | 0   | August 20, 2023 | -                                   | 25   | 40                     | ND      | ND           | ND                               | ND                             | ND                                | ND          | ND                                    | 97                     |
| DH23-22   | 2   | August 20, 2023 | -                                   | 38   | 41                     | ND      | ND           | ND                               | ND                             | ND                                | ND          | ND                                    | 220                    |

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad) Bold and green shaded indicates exceedance outside of NMOCD Reclamation Criteria (off-pad)





September 11, 2023

Kent Stallings Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (505) 350-1336 FAX:

RE: Hackberry 18 Fed 2 Battery

OrderNo.: 2308F22

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 16 sample(s) on 8/29/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

2308F22-001

**Project:** 

Lab ID:

**Analytical Report** Lab Order 2308F22

## Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Date Reported: 9/11/2023 Client Sample ID: BH23-01 0.0' Collection Date: 8/18/2023 9:00:00 AM

Received Date: 8/29/2023 7:55:00 AM

| Analyses                            | Result | RL Qu    | ual Units | DF | Date Analyzed        |
|-------------------------------------|--------|----------|-----------|----|----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE OR | GANICS |          |           |    | Analyst: PRD         |
| Diesel Range Organics (DRO)         | ND     | 8.7      | mg/Kg     | 1  | 9/1/2023 1:55:47 AM  |
| Motor Oil Range Organics (MRO)      | ND     | 44       | mg/Kg     | 1  | 9/1/2023 1:55:47 AM  |
| Surr: DNOP                          | 96.8   | 69-147   | %Rec      | 1  | 9/1/2023 1:55:47 AM  |
| EPA METHOD 8015D: GASOLINE RANGE    |        |          |           |    | Analyst: JJP         |
| Gasoline Range Organics (GRO)       | ND     | 4.9      | mg/Kg     | 1  | 8/30/2023 8:40:02 PM |
| Surr: BFB                           | 94.3   | 15-244   | %Rec      | 1  | 8/30/2023 8:40:02 PM |
| EPA METHOD 8021B: VOLATILES         |        |          |           |    | Analyst: JJP         |
| Benzene                             | ND     | 0.024    | mg/Kg     | 1  | 8/30/2023 8:40:02 PM |
| Toluene                             | ND     | 0.049    | mg/Kg     | 1  | 8/30/2023 8:40:02 PM |
| Ethylbenzene                        | ND     | 0.049    | mg/Kg     | 1  | 8/30/2023 8:40:02 PM |
| Xylenes, Total                      | ND     | 0.098    | mg/Kg     | 1  | 8/30/2023 8:40:02 PM |
| Surr: 4-Bromofluorobenzene          | 105    | 39.1-146 | %Rec      | 1  | 8/30/2023 8:40:02 PM |
| EPA METHOD 300.0: ANIONS            |        |          |           |    | Analyst: SNS         |
| Chloride                            | ND     | 60       | mg/Kg     | 20 | 8/31/2023 9:19:43 PM |

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

- Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 21

Analytical Report Lab Order 2308F22

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023
Client Sample ID: BH23-01 2.0'

| Project: | Hackberry 18 Fed 2 Battery | <b>Collection Date:</b> 8/18/2023 9:10:00 AM |          |             |        |                      |  |  |
|----------|----------------------------|--|----------|-------------|--------|----------------------|--|--|
| Lab ID:  | 2308F22-002                | Matrix: SOIL                                 | Rec      | eived Date: | 8/29/2 | 023 7:55:00 AM       |  |  |
| Analyses |                            | Result                                       | RL Q     | ual Units   | DF     | Date Analyzed        |  |  |
| EPA ME   | THOD 8015M/D: DIESEL RANG  | E ORGANICS                                   |          |             |        | Analyst: PRD         |  |  |
| Diesel R | ange Organics (DRO)        | ND   | 9.6      | mg/Kg       | 1      | 9/1/2023 2:06:44 AM  |  |  |
| Motor O  | il Range Organics (MRO)    | ND   | 48       | mg/Kg       | 1      | 9/1/2023 2:06:44 AM  |  |  |
| Surr:    | DNOP                       | 98.8   | 69-147   | %Rec        | 1      | 9/1/2023 2:06:44 AM  |  |  |
| EPA ME   | THOD 8015D: GASOLINE RAN   | GE   |          |             |        | Analyst: JJP         |  |  |
| Gasoline | e Range Organics (GRO)     | ND   | 4.7      | mg/Kg       | 1      | 8/30/2023 9:50:43 PM |  |  |
| Surr:    | BFB                        | 96.7   | 15-244   | %Rec        | 1      | 8/30/2023 9:50:43 PM |  |  |
| EPA ME   | THOD 8021B: VOLATILES      |  |          |             |        | Analyst: JJP         |  |  |
| Benzene  | 9                          | ND   | 0.024    | mg/Kg       | 1      | 8/30/2023 9:50:43 PM |  |  |
| Toluene  |                            | ND   | 0.047    | mg/Kg       | 1      | 8/30/2023 9:50:43 PM |  |  |
| Ethylber | nzene                      | ND   | 0.047    | mg/Kg       | 1      | 8/30/2023 9:50:43 PM |  |  |
| Xylenes. | , Total                    | ND   | 0.094    | mg/Kg       | 1      | 8/30/2023 9:50:43 PM |  |  |
| Surr:    | 4-Bromofluorobenzene       | 108  | 39.1-146 | %Rec        | 1      | 8/30/2023 9:50:43 PM |  |  |
| EPA ME   | THOD 300.0: ANIONS         |  |          |             |        | Analyst: SNS         |  |  |
| Chloride |                            | 320  | 60       | mg/Kg       | 20     | 8/31/2023 9:32:08 PM |  |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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**Analytical Report** Lab Order 2308F22

8/31/2023 9:44:33 PM

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-02 0.0' Collection Date: 8/18/2023 9:20:00 AM

| Project: | Hackberry 18 Fed 2 Battery | Collection Date: 8/18/2023 9:20:00 AM |          |   |    |                       |  |  |
|----------|----------------------------|---------------------------------------|----------|---|----|-----------------------|--|--|
| Lab ID:  | 2308F22-003                | Matrix: SOIL                          | Rece     | <b>Received Date:</b> 8/29/2023 7:55:00 A |    |                       |  |  |
| Analyses |                            | Result                                | RL Qu    | al Units                                  | DF | Date Analyzed         |  |  |
| EPA ME   | THOD 8015M/D: DIESEL RANG  | E ORGANICS                            |          |   |    | Analyst: PRD          |  |  |
| Diesel R | ange Organics (DRO)        | 21                                    | 9.1      | mg/Kg                                     | 1  | 9/1/2023 2:17:47 AM   |  |  |
| Motor O  | il Range Organics (MRO)    | ND                                    | 45       | mg/Kg                                     | 1  | 9/1/2023 2:17:47 AM   |  |  |
| Surr:    | DNOP                       | 97.1                                  | 69-147   | %Rec                                      | 1  | 9/1/2023 2:17:47 AM   |  |  |
| EPA ME   | THOD 8015D: GASOLINE RANG  | <b>E</b>                              |          |   |    | Analyst: JJP          |  |  |
| Gasoline | e Range Organics (GRO)     | ND                                    | 4.6      | mg/Kg                                     | 1  | 8/30/2023 11:01:07 PM |  |  |
| Surr:    | BFB                        | 93.0                                  | 15-244   | %Rec                                      | 1  | 8/30/2023 11:01:07 PM |  |  |
| EPA ME   | THOD 8021B: VOLATILES      |                                       |          |   |    | Analyst: JJP          |  |  |
| Benzene  | 9                          | ND                                    | 0.023    | mg/Kg                                     | 1  | 8/30/2023 11:01:07 PM |  |  |
| Toluene  |                            | ND                                    | 0.046    | mg/Kg                                     | 1  | 8/30/2023 11:01:07 PM |  |  |
| Ethylber | izene                      | ND                                    | 0.046    | mg/Kg                                     | 1  | 8/30/2023 11:01:07 PM |  |  |
| Xylenes, | Total                      | ND                                    | 0.092    | mg/Kg                                     | 1  | 8/30/2023 11:01:07 PM |  |  |
| Surr:    | 4-Bromofluorobenzene       | 104                                   | 39.1-146 | %Rec                                      | 1  | 8/30/2023 11:01:07 PM |  |  |
| EPA ME   | THOD 300.0: ANIONS         |                                       |          |   |    | Analyst: SNS          |  |  |

880

60

mg/Kg

20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Chloride

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits

Р Sample pH Not In Range Reporting Limit

RL

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2308F22-004

**Project:** 

Lab ID:

**Analytical Report** Lab Order 2308F22

Date Reported: 9/11/2023

## Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Client Sample ID: BH23-02 2.0' Collection Date: 8/18/2023 9:30:00 AM Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM

| Analyses                             | Result | RL Qu    | al Units | DF | Date Analyzed         |
|--------------------------------------|--------|----------|----------|----|-----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE ORG | SANICS |          |          |    | Analyst: PRD          |
| Diesel Range Organics (DRO)          | ND     | 9.6      | mg/Kg    | 1  | 9/1/2023 2:39:33 AM   |
| Motor Oil Range Organics (MRO)       | ND     | 48       | mg/Kg    | 1  | 9/1/2023 2:39:33 AM   |
| Surr: DNOP                           | 99.7   | 69-147   | %Rec     | 1  | 9/1/2023 2:39:33 AM   |
| EPA METHOD 8015D: GASOLINE RANGE     |        |          |          |    | Analyst: JJP          |
| Gasoline Range Organics (GRO)        | ND     | 4.9      | mg/Kg    | 1  | 8/30/2023 11:24:32 PM |
| Surr: BFB                            | 93.4   | 15-244   | %Rec     | 1  | 8/30/2023 11:24:32 PM |
| EPA METHOD 8021B: VOLATILES          |        |          |          |    | Analyst: JJP          |
| Benzene                              | ND     | 0.024    | mg/Kg    | 1  | 8/30/2023 11:24:32 PM |
| Toluene                              | ND     | 0.049    | mg/Kg    | 1  | 8/30/2023 11:24:32 PM |
| Ethylbenzene                         | ND     | 0.049    | mg/Kg    | 1  | 8/30/2023 11:24:32 PM |
| Xylenes, Total                       | ND     | 0.097    | mg/Kg    | 1  | 8/30/2023 11:24:32 PM |
| Surr: 4-Bromofluorobenzene           | 105    | 39.1-146 | %Rec     | 1  | 8/30/2023 11:24:32 PM |
| EPA METHOD 300.0: ANIONS             |        |          |          |    | Analyst: SNS          |
| Chloride                             | 550    | 60       | mg/Kg    | 20 | 8/31/2023 9:56:58 PM  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

\* Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

- D н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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**Analytical Report** Lab Order 2308F22

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-03 0.0'

|                 |                            |                                       |          | -          |        |                       |  |  |
|-----------------|----------------------------|---------------------------------------|----------|------------|--------|-----------------------|--|--|
| <b>Project:</b> | Hackberry 18 Fed 2 Battery | Collection Date: 8/18/2023 9:40:00 AM |          |            |        |                       |  |  |
| Lab ID:         | 2308F22-005                | Matrix: SOIL                          | Rece     | ived Date: | 8/29/2 | 023 7:55:00 AM        |  |  |
| Analyses        |                            | Result                                | RL Qu    | al Units   | DF     | Date Analyzed         |  |  |
| EPA ME          | THOD 8015M/D: DIESEL RANG  | E ORGANICS                            |          |            |        | Analyst: PRD          |  |  |
| Diesel R        | Range Organics (DRO)       | ND                                    | 9.6      | mg/Kg      | 1      | 9/1/2023 2:50:27 AM   |  |  |
| Motor O         | il Range Organics (MRO)    | ND                                    | 48       | mg/Kg      | 1      | 9/1/2023 2:50:27 AM   |  |  |
| Surr:           | DNOP                       | 97.0                                  | 69-147   | %Rec       | 1      | 9/1/2023 2:50:27 AM   |  |  |
| EPA ME          | THOD 8015D: GASOLINE RAN   | GE                                    |          |            |        | Analyst: JJP          |  |  |
| Gasoline        | e Range Organics (GRO)     | ND                                    | 4.8      | mg/Kg      | 1      | 8/30/2023 11:47:55 PM |  |  |
| Surr:           | BFB                        | 92.2                                  | 15-244   | %Rec       | 1      | 8/30/2023 11:47:55 PM |  |  |
| EPA ME          | THOD 8021B: VOLATILES      |                                       |          |            |        | Analyst: JJP          |  |  |
| Benzene         | e                          | ND                                    | 0.024    | mg/Kg      | 1      | 8/30/2023 11:47:55 PM |  |  |
| Toluene         |                            | ND                                    | 0.048    | mg/Kg      | 1      | 8/30/2023 11:47:55 PM |  |  |
| Ethylber        | nzene                      | ND                                    | 0.048    | mg/Kg      | 1      | 8/30/2023 11:47:55 PM |  |  |
| Xylenes         | , Total                    | ND                                    | 0.095    | mg/Kg      | 1      | 8/30/2023 11:47:55 PM |  |  |
| Surr:           | 4-Bromofluorobenzene       | 104                                   | 39.1-146 | %Rec       | 1      | 8/30/2023 11:47:55 PM |  |  |
| EPA ME          | THOD 300.0: ANIONS         |                                       |          |            |        | Analyst: SNS          |  |  |
| Chloride        | 2                          | 2400                                  | 150      | mg/Kg      | 50     | 9/1/2023 7:48:38 AM   |  |  |
|                 |                            |                                       |          |            |        |                       |  |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

- \* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project:

**Analytical Report** Lab Order 2308F22

Date Reported: 9/11/2023

## Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Client Sample ID: BH23-03 2.0' Collection Date: 8/18/2023 9:50:00 AM Received Date: 8/29/2023 7:55:00 AM

| Lab ID: 2308F22-006             | Matrix: SOIL | <b>Received Date:</b> 8/29/2023 7:55:00 AM |          |    |                       |
|---------------------------------|--------------|--|----------|----|-----------------------|
| Analyses                        | Result       | RL Qu                                      | al Units | DF | Date Analyzed         |
| EPA METHOD 8015M/D: DIESEL RANG | E ORGANICS   |  |          |    | Analyst: PRD          |
| Diesel Range Organics (DRO)     | ND           | 9.7  | mg/Kg    | 1  | 9/1/2023 3:01:19 AM   |
| Motor Oil Range Organics (MRO)  | ND           | 49   | mg/Kg    | 1  | 9/1/2023 3:01:19 AM   |
| Surr: DNOP                      | 93.4         | 69-147                                     | %Rec     | 1  | 9/1/2023 3:01:19 AM   |
| EPA METHOD 8015D: GASOLINE RANG | GE           |  |          |    | Analyst: JJP          |
| Gasoline Range Organics (GRO)   | ND           | 4.8  | mg/Kg    | 1  | 8/31/2023 12:11:23 AM |
| Surr: BFB                       | 92.0         | 15-244                                     | %Rec     | 1  | 8/31/2023 12:11:23 AM |
| EPA METHOD 8021B: VOLATILES     |              |  |          |    | Analyst: JJP          |
| Benzene                         | ND           | 0.024                                      | mg/Kg    | 1  | 8/31/2023 12:11:23 AM |
| Toluene                         | ND           | 0.048                                      | mg/Kg    | 1  | 8/31/2023 12:11:23 AM |
| Ethylbenzene                    | ND           | 0.048                                      | mg/Kg    | 1  | 8/31/2023 12:11:23 AM |
| Xylenes, Total                  | ND           | 0.097                                      | mg/Kg    | 1  | 8/31/2023 12:11:23 AM |
| Surr: 4-Bromofluorobenzene      | 104          | 39.1-146                                   | %Rec     | 1  | 8/31/2023 12:11:23 AM |
| EPA METHOD 300.0: ANIONS        |              |  |          |    | Analyst: SNS          |
| Chloride                        | 430          | 60   | mg/Kg    | 20 | 8/31/2023 10:21:46 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits

Р Sample pH Not In Range RL Reporting Limit

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**Analytical Report** Lab Order 2308F22

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-04 0.0' Collection Date: 8/18/2023 10:00:00 AM

| <b>Project:</b> | Hackberry 18 Fed 2 Battery |              | Colle                               | ction Date: | 8/18/2 | 023 10:00:00 AM       |  |
|-----------------|----------------------------|--------------|-------------------------------------|-------------|--------|-----------------------|--|
| Lab ID:         | 2308F22-007                | Matrix: SOIL | Received Date: 8/29/2023 7:55:00 AM |             |        |                       |  |
| Analyses        |                            | Result       | RL Qu                               | al Units    | DF     | Date Analyzed         |  |
| EPA ME          | THOD 8015M/D: DIESEL RANG  | E ORGANICS   |                                     |             |        | Analyst: PRD          |  |
| Diesel R        | ange Organics (DRO)        | ND           | 9.0                                 | mg/Kg       | 1      | 9/1/2023 3:12:11 AM   |  |
| Motor O         | il Range Organics (MRO)    | ND           | 45                                  | mg/Kg       | 1      | 9/1/2023 3:12:11 AM   |  |
| Surr:           | DNOP                       | 93.9         | 69-147                              | %Rec        | 1      | 9/1/2023 3:12:11 AM   |  |
| EPA ME          | THOD 8015D: GASOLINE RAN   | GE           |                                     |             |        | Analyst: JJP          |  |
| Gasoline        | e Range Organics (GRO)     | ND           | 4.8                                 | mg/Kg       | 1      | 8/31/2023 12:34:46 AM |  |
| Surr:           |                            | 92.1         | 15-244                              | %Rec        | 1      | 8/31/2023 12:34:46 AM |  |
| EPA ME          | THOD 8021B: VOLATILES      |              |                                     |             |        | Analyst: JJP          |  |
| Benzene         | e                          | ND           | 0.024                               | mg/Kg       | 1      | 8/31/2023 12:34:46 AM |  |
| Toluene         |                            | ND           | 0.048                               | mg/Kg       | 1      | 8/31/2023 12:34:46 AM |  |
| Ethylber        | nzene                      | ND           | 0.048                               | mg/Kg       | 1      | 8/31/2023 12:34:46 AM |  |
| Xylenes         | , Total                    | ND           | 0.097                               | mg/Kg       | 1      | 8/31/2023 12:34:46 AM |  |
| Surr:           | 4-Bromofluorobenzene       | 104          | 39.1-146                            | %Rec        | 1      | 8/31/2023 12:34:46 AM |  |
| EPA ME          | THOD 300.0: ANIONS         |              |                                     |             |        | Analyst: SNS          |  |
| Chloride        | 9                          | 1000         | 60                                  | mg/Kg       | 20     | 8/31/2023 10:34:10 PM |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

ND PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits

Р Sample pH Not In Range RL Reporting Limit

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**Project:** Hackberry 18 Fed 2 Battery

**Analytical Report** Lab Order 2308F22

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-04 2.0' Collection Date: 8/18/2023 10:10:00 AM

| Lab ID: 2308F22-008            | Matrix: SOIL | Received Date: 8/29/2023 7:55:00 AM |          |    |                       |
|--------------------------------|--------------|-------------------------------------|----------|----|-----------------------|
| Analyses                       | Result       | RL Qu                               | al Units | DF | Date Analyzed         |
| EPA METHOD 8015M/D: DIESEL RAN | IGE ORGANICS |                                     |          |    | Analyst: PRD          |
| Diesel Range Organics (DRO)    | ND           | 10                                  | mg/Kg    | 1  | 9/1/2023 3:23:06 AM   |
| Motor Oil Range Organics (MRO) | ND           | 50                                  | mg/Kg    | 1  | 9/1/2023 3:23:06 AM   |
| Surr: DNOP                     | 93.2         | 69-147                              | %Rec     | 1  | 9/1/2023 3:23:06 AM   |
| EPA METHOD 8015D: GASOLINE RA  | NGE          |                                     |          |    | Analyst: JJP          |
| Gasoline Range Organics (GRO)  | ND           | 5.0                                 | mg/Kg    | 1  | 8/31/2023 12:58:08 AM |
| Surr: BFB                      | 90.5         | 15-244                              | %Rec     | 1  | 8/31/2023 12:58:08 AM |
| EPA METHOD 8021B: VOLATILES    |              |                                     |          |    | Analyst: JJP          |
| Benzene                        | ND           | 0.025                               | mg/Kg    | 1  | 8/31/2023 12:58:08 AM |
| Toluene                        | ND           | 0.050                               | mg/Kg    | 1  | 8/31/2023 12:58:08 AM |
| Ethylbenzene                   | ND           | 0.050                               | mg/Kg    | 1  | 8/31/2023 12:58:08 AM |
| Xylenes, Total                 | ND           | 0.099                               | mg/Kg    | 1  | 8/31/2023 12:58:08 AM |
| Surr: 4-Bromofluorobenzene     | 102          | 39.1-146                            | %Rec     | 1  | 8/31/2023 12:58:08 AM |
| EPA METHOD 300.0: ANIONS       |              |                                     |          |    | Analyst: SNS          |
| Chloride                       | 280          | 60                                  | mg/Kg    | 20 | 8/31/2023 11:11:24 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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**Project:** Hackberry 18 Fed 2 Battery

**Analytical Report** Lab Order 2308F22

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-05 0.0' Collection Date: 8/18/2023 10:20:00 AM

| Lab ID: 2308F22-009            | Matrix: SOIL | <b>Received Date:</b> 8/29/2023 7:55:00 AM |          |    |                      |
|--------------------------------|--------------|--|----------|----|----------------------|
| Analyses                       | Result       | RL Qu                                      | al Units | DF | Date Analyzed        |
| EPA METHOD 8015M/D: DIESEL RA  | NGE ORGANICS |  |          |    | Analyst: PRD         |
| Diesel Range Organics (DRO)    | ND           | 9.5  | mg/Kg    | 1  | 9/1/2023 3:33:55 AM  |
| Motor Oil Range Organics (MRO) | ND           | 47   | mg/Kg    | 1  | 9/1/2023 3:33:55 AM  |
| Surr: DNOP                     | 96.4         | 69-147                                     | %Rec     | 1  | 9/1/2023 3:33:55 AM  |
| EPA METHOD 8015D: GASOLINE R   | ANGE         |  |          |    | Analyst: JJP         |
| Gasoline Range Organics (GRO)  | ND           | 4.7  | mg/Kg    | 1  | 8/31/2023 1:21:34 AM |
| Surr: BFB                      | 91.9         | 15-244                                     | %Rec     | 1  | 8/31/2023 1:21:34 AM |
| EPA METHOD 8021B: VOLATILES    |              |  |          |    | Analyst: JJP         |
| Benzene                        | ND           | 0.023                                      | mg/Kg    | 1  | 8/31/2023 1:21:34 AM |
| Toluene                        | ND           | 0.047                                      | mg/Kg    | 1  | 8/31/2023 1:21:34 AM |
| Ethylbenzene                   | ND           | 0.047                                      | mg/Kg    | 1  | 8/31/2023 1:21:34 AM |
| Xylenes, Total                 | ND           | 0.093                                      | mg/Kg    | 1  | 8/31/2023 1:21:34 AM |
| Surr: 4-Bromofluorobenzene     | 103          | 39.1-146                                   | %Rec     | 1  | 8/31/2023 1:21:34 AM |
| EPA METHOD 300.0: ANIONS       |              |  |          |    | Analyst: SNS         |
| Chloride                       | 3400         | 150  | mg/Kg    | 50 | 9/1/2023 8:01:03 AM  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL

Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

Analyte detected in the associated Method Blank в

Above Quantitation Range/Estimated Value Е

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 9 of 21

**Analytical Report** Lab Order 2308F22

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-05 2.0' Collection Date: 8/18/2023 10:30:00 AM

| Project: | Hackberry 18 Fed 2 Battery | Collection Date: 8/18/2023 10:30:00 AM |                                     |       |    |                       |  |
|----------|----------------------------|--|-------------------------------------|-------|----|-----------------------|--|
| Lab ID:  | 2308F22-010                | Matrix: SOIL                           | Received Date: 8/29/2023 7:55:00 AM |       |    |                       |  |
| Analyses |                            | Result                                 | RL Qual                             | Units | DF | Date Analyzed         |  |
| EPA ME   | THOD 8015M/D: DIESEL RANG  | E ORGANICS                             |                                     |       |    | Analyst: PRD          |  |
| Diesel R | ange Organics (DRO)        | ND                                     | 9.9                                 | mg/Kg | 1  | 9/1/2023 3:44:47 AM   |  |
| Motor Oi | I Range Organics (MRO)     | ND                                     | 49                                  | mg/Kg | 1  | 9/1/2023 3:44:47 AM   |  |
| Surr: [  | ONOP                       | 95.2                                   | 69-147                              | %Rec  | 1  | 9/1/2023 3:44:47 AM   |  |
| EPA ME   | THOD 8015D: GASOLINE RANG  | GE                                     |                                     |       |    | Analyst: JJP          |  |
| Gasoline | Range Organics (GRO)       | ND                                     | 4.9                                 | mg/Kg | 1  | 8/31/2023 1:44:56 AM  |  |
| Surr: E  | 3FB                        | 95.2                                   | 15-244                              | %Rec  | 1  | 8/31/2023 1:44:56 AM  |  |
| EPA ME   | THOD 8021B: VOLATILES      |  |                                     |       |    | Analyst: JJP          |  |
| Benzene  |                            | ND                                     | 0.024                               | mg/Kg | 1  | 8/31/2023 1:44:56 AM  |  |
| Toluene  |                            | ND                                     | 0.049                               | mg/Kg | 1  | 8/31/2023 1:44:56 AM  |  |
| Ethylben | zene                       | ND                                     | 0.049                               | mg/Kg | 1  | 8/31/2023 1:44:56 AM  |  |
| Xylenes, | Total                      | ND                                     | 0.097                               | mg/Kg | 1  | 8/31/2023 1:44:56 AM  |  |
| Surr: 4  | 4-Bromofluorobenzene       | 107                                    | 39.1-146                            | %Rec  | 1  | 8/31/2023 1:44:56 AM  |  |
| EPA ME   | THOD 300.0: ANIONS         |  |                                     |       |    | Analyst: SNS          |  |
| Chloride |                            | 1400                                   | 60                                  | mg/Kg | 20 | 8/31/2023 11:36:13 PM |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL

Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 10 of 21

2308F22-011

**Project:** 

Lab ID:

**Analytical Report** Lab Order 2308F22

## Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Date Reported: 9/11/2023 Client Sample ID: BH23-06 0.0' Collection Date: 8/18/2023 10:40:00 AM

Received Date: 8/29/2023 7:55:00 AM

| Analyses                            | Result       | RL Qu    | ual Units | DF | Date Analyzed         |
|-------------------------------------|--------------|----------|-----------|----|-----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE OR | Analyst: PRD |          |           |    |                       |
| Diesel Range Organics (DRO)         | ND           | 8.9      | mg/Kg     | 1  | 9/1/2023 3:55:36 AM   |
| Motor Oil Range Organics (MRO)      | ND           | 45       | mg/Kg     | 1  | 9/1/2023 3:55:36 AM   |
| Surr: DNOP                          | 98.4         | 69-147   | %Rec      | 1  | 9/1/2023 3:55:36 AM   |
| EPA METHOD 8015D: GASOLINE RANGE    |              |          |           |    | Analyst: JJP          |
| Gasoline Range Organics (GRO)       | ND           | 4.9      | mg/Kg     | 1  | 8/31/2023 2:31:46 AM  |
| Surr: BFB                           | 93.5         | 15-244   | %Rec      | 1  | 8/31/2023 2:31:46 AM  |
| EPA METHOD 8021B: VOLATILES         |              |          |           |    | Analyst: JJP          |
| Benzene                             | ND           | 0.024    | mg/Kg     | 1  | 8/31/2023 2:31:46 AM  |
| Toluene                             | ND           | 0.049    | mg/Kg     | 1  | 8/31/2023 2:31:46 AM  |
| Ethylbenzene                        | ND           | 0.049    | mg/Kg     | 1  | 8/31/2023 2:31:46 AM  |
| Xylenes, Total                      | ND           | 0.097    | mg/Kg     | 1  | 8/31/2023 2:31:46 AM  |
| Surr: 4-Bromofluorobenzene          | 105          | 39.1-146 | %Rec      | 1  | 8/31/2023 2:31:46 AM  |
| EPA METHOD 300.0: ANIONS            |              |          |           |    | Analyst: SNS          |
| Chloride                            | 260          | 60       | mg/Kg     | 20 | 8/31/2023 11:48:38 PM |

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

Analyte detected in the associated Method Blank в

Above Quantitation Range/Estimated Value Е

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 11 of 21

**Project:** 

Analytical Report Lab Order 2308F22

### Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Date Reported: 9/11/2023 Client Sample ID: BH23-06 2.0' Collection Date: 8/18/2023 10:50:00 AM

Lab ID: 2308F22-012 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.0 mg/Kg 1 9/1/2023 4:06:21 AM Motor Oil Range Organics (MRO) ND 45 mg/Kg 1 9/1/2023 4:06:21 AM Surr: DNOP 99.7 69-147 %Rec 1 9/1/2023 4:06:21 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 2:55:14 AM 4.9 mg/Kg 1 Surr: BFB 91.9 15-244 %Rec 1 8/31/2023 2:55:14 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 2:55:14 AM 0.025 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/31/2023 2:55:14 AM Ethylbenzene ND 0.049 mg/Kg 1 8/31/2023 2:55:14 AM Xylenes, Total ND mg/Kg 1 8/31/2023 2:55:14 AM 0.099 Surr: 4-Bromofluorobenzene 103 39.1-146 %Rec 1 8/31/2023 2:55:14 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 6:42:41 PM 250 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range RL Reporting Limit

RL Reportin

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2308F22-013

**Project:** 

Lab ID:

**Analytical Report** Lab Order 2308F22

### Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Date Reported: 9/11/2023 Client Sample ID: BH23-07 0.0' Collection Date: 8/18/2023 11:00:00 AM

Received Date: 8/29/2023 7:55:00 AM

| Analyses                            | Result | RL Q     | ual Units | DF | Date Analyzed        |
|-------------------------------------|--------|----------|-----------|----|----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE OR | GANICS |          |           |    | Analyst: PRD         |
| Diesel Range Organics (DRO)         | ND     | 8.8      | mg/Kg     | 1  | 9/1/2023 4:17:06 AM  |
| Motor Oil Range Organics (MRO)      | ND     | 44       | mg/Kg     | 1  | 9/1/2023 4:17:06 AM  |
| Surr: DNOP                          | 93.8   | 69-147   | %Rec      | 1  | 9/1/2023 4:17:06 AM  |
| EPA METHOD 8015D: GASOLINE RANGE    |        |          |           |    | Analyst: JJP         |
| Gasoline Range Organics (GRO)       | ND     | 4.7      | mg/Kg     | 1  | 8/31/2023 3:18:46 AM |
| Surr: BFB                           | 93.1   | 15-244   | %Rec      | 1  | 8/31/2023 3:18:46 AM |
| EPA METHOD 8021B: VOLATILES         |        |          |           |    | Analyst: JJP         |
| Benzene                             | ND     | 0.023    | mg/Kg     | 1  | 8/31/2023 3:18:46 AM |
| Toluene                             | ND     | 0.047    | mg/Kg     | 1  | 8/31/2023 3:18:46 AM |
| Ethylbenzene                        | ND     | 0.047    | mg/Kg     | 1  | 8/31/2023 3:18:46 AM |
| Xylenes, Total                      | ND     | 0.094    | mg/Kg     | 1  | 8/31/2023 3:18:46 AM |
| Surr: 4-Bromofluorobenzene          | 104    | 39.1-146 | %Rec      | 1  | 8/31/2023 3:18:46 AM |
| EPA METHOD 300.0: ANIONS            |        |          |           |    | Analyst: RBC         |
| Chloride                            | ND     | 60       | mg/Kg     | 20 | 8/31/2023 6:55:06 PM |

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit

RL

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2308F22-014

**Project:** 

Lab ID:

**Analytical Report** Lab Order 2308F22

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Client Sample ID: BH23-07 2.0' Collection Date: 8/18/2023 11:10:00 AM Received Date: 8/29/2023 7:55:00 AM

|                                    | Result  | RL (     | Qual Units | DF | Date Analyzed        |
|------------------------------------|---------|----------|------------|----|----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE O | RGANICS |          |            |    | Analyst: PRD         |
| Diesel Range Organics (DRO)        | ND      | 9.5      | mg/Kg      | 1  | 9/1/2023 4:27:49 AM  |
| Motor Oil Range Organics (MRO)     | ND      | 47       | mg/Kg      | 1  | 9/1/2023 4:27:49 AM  |
| Surr: DNOP                         | 92.7    | 69-147   | %Rec       | 1  | 9/1/2023 4:27:49 AM  |
| EPA METHOD 8015D: GASOLINE RANGE   |         |          |            |    | Analyst: JJP         |
| Gasoline Range Organics (GRO)      | ND      | 4.8      | mg/Kg      | 1  | 8/31/2023 3:42:15 AM |
| Surr: BFB                          | 90.5    | 15-244   | %Rec       | 1  | 8/31/2023 3:42:15 AM |
| EPA METHOD 8021B: VOLATILES        |         |          |            |    | Analyst: JJP         |
| Benzene                            | ND      | 0.024    | mg/Kg      | 1  | 8/31/2023 3:42:15 AM |
| Toluene                            | ND      | 0.048    | mg/Kg      | 1  | 8/31/2023 3:42:15 AM |
| Ethylbenzene                       | ND      | 0.048    | mg/Kg      | 1  | 8/31/2023 3:42:15 AM |
| Xylenes, Total                     | ND      | 0.097    | mg/Kg      | 1  | 8/31/2023 3:42:15 AM |
| Surr: 4-Bromofluorobenzene         | 101     | 39.1-146 | %Rec       | 1  | 8/31/2023 3:42:15 AM |
| EPA METHOD 300.0: ANIONS           |         |          |            |    | Analyst: RBC         |
| Chloride                           | ND      | 60       | mg/Kg      | 20 | 8/31/2023 8:21:58 PM |

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit

RL

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2308F22-015

**Project:** 

Lab ID:

**Analytical Report** Lab Order 2308F22

### Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Date Reported: 9/11/2023 Client Sample ID: BH23-08 0.0' Collection Date: 8/18/2023 11:20:00 AM

Received Date: 8/29/2023 7:55:00 AM

| Analyses                           | Result  | RL Q     | ual Units | DF | Date Analyzed        |
|------------------------------------|---------|----------|-----------|----|----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE O | RGANICS |          |           |    | Analyst: PRD         |
| Diesel Range Organics (DRO)        | ND      | 9.8      | mg/Kg     | 1  | 9/1/2023 4:38:32 AM  |
| Motor Oil Range Organics (MRO)     | ND      | 49       | mg/Kg     | 1  | 9/1/2023 4:38:32 AM  |
| Surr: DNOP                         | 109     | 69-147   | %Rec      | 1  | 9/1/2023 4:38:32 AM  |
| EPA METHOD 8015D: GASOLINE RANGE   |         |          |           |    | Analyst: JJP         |
| Gasoline Range Organics (GRO)      | ND      | 5.0      | mg/Kg     | 1  | 8/31/2023 4:05:39 AM |
| Surr: BFB                          | 92.2    | 15-244   | %Rec      | 1  | 8/31/2023 4:05:39 AM |
| EPA METHOD 8021B: VOLATILES        |         |          |           |    | Analyst: JJP         |
| Benzene                            | ND      | 0.025    | mg/Kg     | 1  | 8/31/2023 4:05:39 AM |
| Toluene                            | ND      | 0.050    | mg/Kg     | 1  | 8/31/2023 4:05:39 AM |
| Ethylbenzene                       | ND      | 0.050    | mg/Kg     | 1  | 8/31/2023 4:05:39 AM |
| Xylenes, Total                     | ND      | 0.10     | mg/Kg     | 1  | 8/31/2023 4:05:39 AM |
| Surr: 4-Bromofluorobenzene         | 104     | 39.1-146 | %Rec      | 1  | 8/31/2023 4:05:39 AM |
| EPA METHOD 300.0: ANIONS           |         |          |           |    | Analyst: RBC         |
| Chloride                           | ND      | 60       | mg/Kg     | 20 | 8/31/2023 8:34:23 PM |

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

- Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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**Analytical Report** Lab Order 2308F22

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-08 2.0' Collection Date: 8/18/2023 11:30:00 AM

| Project: | Hackberry 18 Fed 2 Battery | 8 Fed 2 Battery Collection Date: 8/18/2023 11:30:00 AM   |          |       |    |                      |  |  |
|----------|----------------------------|--|----------|-------|----|----------------------|--|--|
| Lab ID:  | 2308F22-016                | Matrix: SOIL         Received Date: 8/29/2023 7:55:00 AM |          |       |    |                      |  |  |
| Analyses |                            | Result   | RL Qual  | Units | DF | Date Analyzed        |  |  |
| EPA ME   | THOD 8015M/D: DIESEL RANG  | E ORGANICS   |          |       |    | Analyst: PRD         |  |  |
| Diesel R | ange Organics (DRO)        | ND   | 9.6      | mg/Kg | 1  | 9/1/2023 4:49:25 AM  |  |  |
| Motor Oi | I Range Organics (MRO)     | ND   | 48       | mg/Kg | 1  | 9/1/2023 4:49:25 AM  |  |  |
| Surr: I  | DNOP                       | 96.9   | 69-147   | %Rec  | 1  | 9/1/2023 4:49:25 AM  |  |  |
| EPA ME   | THOD 8015D: GASOLINE RANG  | GE   |          |       |    | Analyst: <b>JJP</b>  |  |  |
| Gasoline | Range Organics (GRO)       | ND   | 4.9      | mg/Kg | 1  | 8/31/2023 4:29:04 AM |  |  |
| Surr: E  | BFB                        | 93.7   | 15-244   | %Rec  | 1  | 8/31/2023 4:29:04 AM |  |  |
| EPA ME   | THOD 8021B: VOLATILES      |  |          |       |    | Analyst: JJP         |  |  |
| Benzene  |                            | ND   | 0.024    | mg/Kg | 1  | 8/31/2023 4:29:04 AM |  |  |
| Toluene  |                            | ND   | 0.049    | mg/Kg | 1  | 8/31/2023 4:29:04 AM |  |  |
| Ethylben | zene                       | ND   | 0.049    | mg/Kg | 1  | 8/31/2023 4:29:04 AM |  |  |
| Xylenes, | Total                      | ND   | 0.098    | mg/Kg | 1  | 8/31/2023 4:29:04 AM |  |  |
| Surr: 4  | 4-Bromofluorobenzene       | 106  | 39.1-146 | %Rec  | 1  | 8/31/2023 4:29:04 AM |  |  |
| EPA ME   | THOD 300.0: ANIONS         |  |          |       |    | Analyst: RBC         |  |  |
| Chloride |                            | ND   | 60       | mg/Kg | 20 | 8/31/2023 8:46:48 PM |  |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

\* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit

ND PQL Practical Quanitative Limit

- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 16 of 21

Prep Date:

8/31/2023

### **QC SUMMARY REPORT** Hall E

Analysis Date: 8/31/2023

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|------|-----------|--|
|------|-----------|--|

| Hall Environmental Analysis Laboratory, Inc. |          |                                 |                                    | WO#: | 2308F22<br>11-Sep-23 |
|--|----------|---------------------------------|------------------------------------|------|----------------------|
| Client:<br>Project:                          |          | Energy<br>erry 18 Fed 2 Battery |                                    |      |                      |
| Sample ID:                                   | MB-77246 | SampType: MBLK                  | TestCode: EPA Method 300.0: Anions |      |                      |
| Client ID:                                   | PBS      | Batch ID: 77246                 | RunNo: <b>99401</b>                |      |                      |

SeqNo: 3627582

Units: mg/Kg

|                      |  | 5.5                          |
|----------------------|--|------------------------------|
| Analyte              | Result PQL SPK value SPK Ref Val %REC LowLimit | HighLimit %RPD RPDLimit Qual |
| Chloride             | ND 1.5   |                              |
| Sample ID: LCS-77246 | SampType: LCS TestCode: EPA Method 30          | 0.0: Anions                  |
| Client ID: LCSS      | Batch ID: 77246 RunNo: 99401                   |                              |
| Prep Date: 8/31/2023 | Analysis Date: 8/31/2023 SeqNo: 3627583 U      | Jnits: mg/Kg                 |
| Analyte              | Result PQL SPK value SPK Ref Val %REC LowLimit | HighLimit %RPD RPDLimit Qual |
| Chloride             | 14 1.5 15.00 0 93.7 90                         | 110                          |
| Sample ID: MB-77241  | SampType: MBLK TestCode: EPA Method 30         | 0.0: Anions                  |
| Client ID: PBS       | Batch ID: 77241 RunNo: 99389                   |                              |
| Prep Date: 8/31/2023 | Analysis Date: 8/31/2023 SeqNo: 3628254 U      | Jnits: mg/Kg                 |
| Analyte              | Result PQL SPK value SPK Ref Val %REC LowLimit | HighLimit %RPD RPDLimit Qual |
| Chloride             | ND 1.5   |                              |
| Sample ID: LCS-77241 | SampType: LCS TestCode: EPA Method 30          | 0.0: Anions                  |
| Client ID: LCSS      | Batch ID: 77241 RunNo: 99389                   |                              |
| Prep Date: 8/31/2023 | Analysis Date: 8/31/2023 SeqNo: 3628255 U      | Jnits: mg/Kg                 |
| Analyte              | Result PQL SPK value SPK Ref Val %REC LowLimit | HighLimit %RPD RPDLimit Qual |
| Chloride             |  |                              |

**Qualifiers:** 

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- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Released to Imaging: 3/5/2024 11:07:34 AM

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|                          | WO#: | 2308F22   |
|--------------------------|------|-----------|
| nalysis Laboratory, Inc. |      | 11-Sep-23 |

| Client:<br>Project:  | Devon En<br>Hackberry | ergy<br>/ 18 Fed 2 | Batter         | у         |             |                   |           |               |           |           |      |
|--|-----------------------|--------------------|----------------|-----------|-------------|-------------------|-----------|---------------|-----------|-----------|------|
| Sample ID:   | LCS-77177             | SampT              | ype: LC        | S         | Tes         | tCode: EF         | PA Method | 8015M/D: Dies | sel Range | Organics  |      |
| Client ID:   | LCSS                  | Batch              | ID: 77         | 177       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |           |      |
| Prep Date:   | 8/29/2023             | Analysis D         | ate: <b>8/</b> | 31/2023   | 5           | SeqNo: 3          | 627016    | Units: %Rec   |           |           |      |
| Analyte  |                       | Result             | PQL            | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD      | RPDLimit  | Qual |
| Surr: DNOP   |                       | 5.7                |                | 5.000     |             | 114               | 69        | 147           |           |           |      |
| Sample ID:   | MB-77177              | SampT              | ype: ME        | BLK       | Tes         | tCode: EF         | PA Method | 8015M/D: Dies | sel Range | Organics  |      |
| Client ID:   | PBS                   | Batch              | ID: 77         | 177       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |           |      |
| Prep Date:   | 8/29/2023             | Analysis D         | ate: <b>8/</b> | 31/2023   | Ş           | SeqNo: 3          | 627018    | Units: %Rec   |           |           |      |
| Analyte  |                       | Result             | PQL            | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD      | RPDLimit  | Qual |
| Surr: DNOP   |                       | 12                 |                | 10.00     |             | 116               | 69        | 147           |           |           |      |
| Sample ID:         2308F22-016AMS         SampType:         MS         TestCode:         EPA Method 8015M/D: Diesel Range Organics |                       |                    |                |           |             |                   |           |               |           |           |      |
| Client ID:   | BH23-08 2.0'          | Batch              | ID: 77         | 175       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |           |      |
| Prep Date:   | 8/29/2023             | Analysis D         | ate: <b>9/</b> | 1/2023    | S           | SeqNo: 3          | 627538    | Units: mg/K   | g         |           |      |
| Analyte  |                       | Result             | PQL            | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD      | RPDLimit  | Qual |
| Diesel Range (   | Drganics (DRO)        | 42                 | 9.1            | 45.37     | 0           | 93.5              | 54.2      | 135           |           |           |      |
| Surr: DNOP   |                       | 4.1                |                | 4.537     |             | 89.9              | 69        | 147           |           |           |      |
| Sample ID:   | 2308F22-016AMSD       | SampT              | ype: <b>MS</b> | SD        | Tes         | tCode: EF         | PA Method | 8015M/D: Dies | sel Range | Organics  |      |
| Client ID:   | BH23-08 2.0'          | Batch              | ID: 77         | 175       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |           |      |
| Prep Date:   | 8/29/2023             | Analysis D         | ate: <b>9/</b> | 1/2023    | S           | SeqNo: 3          | 627540    | Units: mg/Kg  | g         |           |      |
| Analyte  |                       | Result             | PQL            | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD      | RPDLimit  | Qual |
| Diesel Range (   | Organics (DRO)        | 41                 | 8.9            | 44.56     | 0           | 91.5              | 54.2      | 135           | 3.87      | 29.2      |      |
| Surr: DNOP   |                       | 4.0                |                | 4.456     |             | 89.4              | 69        | 147           | 0         | 0         |      |
| Sample ID:   | LCS-77175             | SampT              | ype: LC        | S         | Tes         | tCode: EF         | PA Method | 8015M/D: Dies | sel Range | Organics  |      |
| Client ID:   | LCSS                  | Batch              | ID: 77         | 175       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |           |      |
| Prep Date:   | 8/29/2023             | Analysis D         | ate: <b>8/</b> | 31/2023   | Ş           | SeqNo: 3          | 627542    | Units: mg/Kg  | g         |           |      |
| Analyte  |                       | Result             | PQL            | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD      | RPDLimit  | Qual |
| Diesel Range (   | Organics (DRO)        | 43                 | 10             | 50.00     | 0           | 87.0              | 61.9      | 130           |           |           |      |
| Surr: DNOP   |                       | 4.7                |                | 5.000     |             | 93.3              | 69        | 147           |           |           |      |
| Sample ID:   | LCS-77176             | SampT              | pe: LC         | S         | Tes         | tCode: Ef         | PA Method | 8015M/D: Dies | sel Range | Organics  |      |
| Client ID:   | LCSS                  | Batch              | ID: 77         | 176       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |           |      |
| Prep Date:   | 8/29/2023             | Analysis D         | ate: <b>8/</b> | 31/2023   | S           | SeqNo: 30         | 627544    | Units: %Rec   |           |           |      |
|  |                       | Decult             |                | SPK value | SPK Ref Val |                   | Loudinait | Light imit    | 0/ 000    | RPDLimit  | Qual |
| Analyte  |                       | Result             | PQL            | SFR value | SER REI Val | %REC              | LowLimit  | HighLimit     | %RPD      | REDLIIIII | Qual |

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| KEPUKI                      | WO#: | 2308F22   |  |
|-----------------------------|------|-----------|--|
| l Analysis Laboratory, Inc. |      | 11-Sep-23 |  |

| Client: Devon E<br>Project: Hackber          | Energy<br>ry 18 Fed 2 Battery |  |
|--|-------------------------------|--|
| Sample ID: LCS-77208                         | SampType: LCS                 | TestCode: EPA Method 8015M/D: Diesel Range Organics      |
| Client ID: LCSS                              | Batch ID: 77208               | RunNo: 99380   |
| Prep Date: 8/30/2023                         | Analysis Date: 8/31/2023      | SeqNo: 3627545 Units: %Rec                               |
| Analyte                                      | Result PQL SPK valu           | e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Surr: DNOP                                   | 5.9 5.00                      | 0 119 69 147   |
| Sample ID: LCS-77213                         | SampType: LCS                 | TestCode: EPA Method 8015M/D: Diesel Range Organics      |
| Client ID: LCSS                              | Batch ID: 77213               | RunNo: 99380   |
| Prep Date: 8/30/2023                         | Analysis Date: 8/31/2023      | SeqNo: 3627547 Units: %Rec                               |
| Analyte                                      | Result PQL SPK valu           | e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Surr: DNOP                                   | 5.3 5.00                      | 0 105 69 147   |
| Sample ID: MB-77175                          | SampType: MBLK                | TestCode: EPA Method 8015M/D: Diesel Range Organics      |
| Client ID: PBS                               | Batch ID: 77175               | RunNo: 99380   |
| Prep Date: 8/29/2023                         | Analysis Date: 8/31/2023      | SeqNo: <b>3627550</b> Units: <b>mg/Kg</b>                |
| Analyte                                      | Result PQL SPK valu           | e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Diesel Range Organics (DRO)                  | ND 10                         |  |
| Motor Oil Range Organics (MRO)<br>Surr: DNOP | ND 50<br>11 10.0              | 0 114 69 147   |
| Sample ID: MB-77176                          | SampType: MBLK                | TestCode: EPA Method 8015M/D: Diesel Range Organics      |
| Client ID: PBS                               | Batch ID: <b>77176</b>        | RunNo: 99380   |
| Prep Date: 8/29/2023                         | Analysis Date: 8/31/2023      | SeqNo: 3627552 Units: %Rec                               |
| Analyte                                      | -                             | e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Surr: DNOP                                   | 13 10.0                       |  |
| Sample ID: MB-77208                          | SampType: <b>MBLK</b>         | TestCode: EPA Method 8015M/D: Diesel Range Organics      |
| Client ID: PBS                               | Batch ID: <b>77208</b>        | RunNo: <b>99380</b>                                      |
| Prep Date: 8/30/2023                         | Analysis Date: 8/31/2023      | SeqNo: <b>3627556</b> Units: <b>%Rec</b>                 |
| Analyte                                      | Result PQL SPK valu           | e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Surr: DNOP                                   | 13 10.0                       |  |
| Sample ID: MB-77213                          | SampType: MBLK                | TestCode: EPA Method 8015M/D: Diesel Range Organics      |
| Client ID: PBS                               | Batch ID: 77213               | RunNo: <b>99380</b>                                      |
| Prep Date: 8/30/2023                         | Analysis Date: 8/31/2023      | SeqNo: 3627557 Units: %Rec                               |
| Analyte                                      | Result PQL SPK valu           | e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Surr: DNOP                                   | 11 10.0                       |  |

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- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

| Client:<br>Project:   | Devon En<br>Hackberry               | nergy<br>y 18 Fed 2 | Battery          | 1              |             |                         |          |               |          |          |      |  |  |
|---|-------------------------------------|---------------------|------------------|----------------|-------------|-------------------------|----------|---------------|----------|----------|------|--|--|
| Sample ID:  | lcs-77140                           | SampT               | ype: LC          | s              | Tes         | tCode: EF               | A Method | 8015D: Gasoli | ne Range |          |      |  |  |
| Client ID:  | LCSS                                | Batch               | ID: 771          | 140            | F           | RunNo: <b>9</b> 9       | 342      |               |          |          |      |  |  |
| Prep Date:  | 8/28/2023                           | Analysis D          | ate: <b>8/</b> 3 | 30/2023        | S           | SeqNo: <b>36</b>        | 24717    | Units: %Rec   |          |          |      |  |  |
| Analyte   |                                     | Result              | PQL              | SPK value      | SPK Ref Val | %REC                    | LowLimit | HighLimit     | %RPD     | RPDLimit | Qual |  |  |
| Surr: BFB   |                                     | 1900                |                  | 1000           |             | 192                     | 15       | 244           |          |          |      |  |  |
| Sample ID:  | mb-77140                            | SampT               | ype: ME          | BLK            | Tes         | tCode: EF               | A Method | 8015D: Gasoli | ne Range |          |      |  |  |
| Client ID:  | D: PBS Batch ID: 77140 RunNo: 99342 |                     |                  |                |             |                         |          |               |          |          |      |  |  |
| Prep Date:  | 8/28/2023                           | Analysis D          | ate: <b>8/</b> 3 | 30/2023        | S           | SeqNo: <b>36</b>        | 24718    | Units: %Rec   |          |          |      |  |  |
| Analyte   |                                     | Result              | PQL              | SPK value      | SPK Ref Val | %REC                    | LowLimit | HighLimit     | %RPD     | RPDLimit | Qual |  |  |
| Surr: BFB   |                                     | 950                 |                  | 1000           |             | 94.7                    | 15       | 244           |          |          |      |  |  |
| Sample ID:         Ics-77168         SampType:         LCS         TestCode:         EPA Method 8015D:         Gasoline Range |                                     |                     |                  |                |             |                         |          |               |          |          |      |  |  |
| Client ID: LCSS Batch ID: 77168 RunNo: 99342  |                                     |                     |                  |                |             |                         |          |               |          |          |      |  |  |
| Prep Date:  | 8/29/2023                           | Analysis D          | ate: 8/3         | 30/2023        | S           | SeqNo: 3625866 Units: m |          |               |          |          |      |  |  |
| Analyte   |                                     | Result              | PQL              | SPK value      | SPK Ref Val | %REC                    | LowLimit | HighLimit     | %RPD     | RPDLimit | Qual |  |  |
| -   | e Organics (GRO)                    | 22                  | 5.0              | 25.00          | 0           | 88.6                    | 70       | 130           |          |          |      |  |  |
| Surr: BFB   |                                     | 1900                |                  | 1000           |             | 195                     | 15       | 244           |          |          |      |  |  |
| Sample ID:  | mb-77168                            | SampT               | ype: ME          | BLK            | Tes         | tCode: EF               | A Method | 8015D: Gasoli | ne Range |          |      |  |  |
| Client ID:  | PBS                                 | Batch               | ID: 771          | 168            | F           | RunNo: <b>9</b> 9       | 342      |               |          |          |      |  |  |
| Prep Date:  | 8/29/2023                           | Analysis D          | ate: 8/3         | 30/2023        | 5           | SeqNo: 36               | 25867    | Units: mg/Kg  | 9        |          |      |  |  |
| Analyte   |                                     | Result              | PQL              | SPK value      | SPK Ref Val | %REC                    | LowLimit | HighLimit     | %RPD     | RPDLimit | Qual |  |  |
| Gasoline Rang<br>Surr: BFB  | e Organics (GRO)                    | ND<br>960           | 5.0              | 1000           |             | 06.0                    | 15       | 244           |          |          |      |  |  |
|   |                                     | 960                 |                  | 1000           |             | 96.0                    | 15       | 244           |          |          |      |  |  |
|   | 2308f22-001ams                      |                     | ype: MS          |                |             |                         |          | 8015D: Gasoli | ne Range |          |      |  |  |
| Client ID:  | BH23-01 0.0'                        |                     | ID: 771          |                |             | RunNo: <b>99</b>        | -        | 11-1-         |          |          |      |  |  |
| Prep Date:  | 8/29/2023                           | Analysis D          | ate: 8/;         |                |             | SeqNo: 36               | 25880    | Units: mg/Kg  | 9        |          |      |  |  |
| Analyte   |                                     | Result              | PQL              |                | SPK Ref Val |                         | LowLimit | HighLimit     | %RPD     | RPDLimit | Qual |  |  |
| Gasoline Rang<br>Surr: BFB  | e Organics (GRO)                    | 24<br>2000          | 4.9              | 24.56<br>982.3 | 0           | 96.0<br>203             | 70<br>15 | 130<br>244    |          |          |      |  |  |
|   |                                     |                     |                  |                |             |                         |          |               |          |          |      |  |  |
|   | 2308f22-001amsd                     |                     | ype: MS          |                |             |                         |          | 8015D: Gasoli | ne Range |          |      |  |  |
| Client ID:  | BH23-01 0.0'                        |                     | ID: 771          |                |             | RunNo: <b>99</b>        |          |               |          |          |      |  |  |
| Prep Date:  | 8/29/2023                           | Analysis D          | ate: 8/3         | 30/2023        | S           | SeqNo: 36               | 625881   | Units: mg/Kg  | 9        |          |      |  |  |
| Analyte   | 0 1 (252)                           | Result              | PQL              |                | SPK Ref Val | %REC                    | LowLimit | HighLimit     | %RPD     | RPDLimit | Qual |  |  |
| Gasoline Rang   | e Organics (GRO)                    | 22                  | 4.9              | 24.39          | 0           | 91.9                    | 70       | 130           | 5.03     | 20       |      |  |  |

#### **Qualifiers:**

Surr: BFB

- Value exceeds Maximum Contaminant Level. \*
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S

1900

Analyte detected in the associated Method Blank в

198

244

15

0

- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

975.6

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0

2308F22

11-Sep-23

| Page | 81 | of 138 |
|------|----|--------|
|------|----|--------|

| WO#: | 2308F22 |
|------|---------|
|      |         |

11-Sep-23

| Client:  | Devon En   | ergy  |  |   |  |   |   |  |   |                            |      |
|--|--|---|--|---|--|---|---|--|---|----------------------------|------|
| Project:   | Hackberry  | y 18 Fed 2  | 2 Battery  | 7   |  |   |   |  |   |                            |      |
| Sample ID:   | 1 CS 77169   | Samo  | Type: LC   | 6   | Tee  | tCode: EE   | A Mothod  | 8021B: Volati  | ilos  |                            |      |
|  |  | •   |  | -   |  |   |   |  | lies  |                            |      |
|  | LCSS   |   | h ID: 771  |   |  | RunNo: 99   |   | 1.   |   |                            |      |
| Prep Date:   | 8/29/2023  | Analysis [  | Date: 8/3  | 30/2023   | 2  | SeqNo: 36   | 25922   | Units: <b>mg/K</b>   | g   |                            |      |
| Analyte  |  | Result  | PQL  |   | SPK Ref Val  | %REC  | LowLimit  | HighLimit  | %RPD  | RPDLimit                   | Qual |
| Benzene  |  | 1.0   | 0.025  | 1.000   | 0  | 102   | 70  | 130  |   |                            |      |
| Toluene  |  | 1.0   | 0.050  | 1.000   | 0  | 103   | 70  | 130  |   |                            |      |
| Ethylbenzene   |  | 1.1   | 0.050  | 1.000   | 0  | 105   | 70  | 130  |   |                            |      |
| Xylenes, Total   |  | 3.2   | 0.10   | 3.000   | 0  | 107   | 70  | 130  |   |                            |      |
| Surr: 4-Brome  | ofluorobenzene   | 1.1   |  | 1.000   |  | 107   | 39.1  | 146  |   |                            |      |
| Sample ID:   | mb-77168   | Samp  | Гуре: <b>МВ</b>  | LK  | Tes  | tCode: EF   | A Method  | 8021B: Volati  | iles  |                            |      |
| Client ID:   | <b>PBS</b> Batch ID: <b>77168</b>  |   |  |   |  | RunNo: <b>99</b>  | 342   |  |   |                            |      |
| Prep Date:   | 8/29/2023  | Analysis [  | Date: 8/3  | 30/2023   | S  | SeqNo: 36   | 25923   | Units: <b>mg/K</b>   | g   |                            |      |
| Analyte  |  | Result  | PQL  | SPK value   | SPK Ref Val  | %REC  | LowLimit  | HighLimit  | %RPD  | RPDLimit                   | Qual |
| Benzene  |  | ND  | 0.025  |   |  |   |   |  |   |                            |      |
| Toluene  |  | ND  | 0.050  |   |  |   |   |  |   |                            |      |
| Ethylbenzene   |  | ND  | 0.050  |   |  |   |   |  |   |                            |      |
| Xylenes, Total   |  | ND  | 0.10   |   |  |   |   |  |   |                            |      |
|  | <i>a</i> 1   |   |  |   |  |   |   |  |   |                            |      |
| Surr: 4-Brome  | ofluorobenzene   | 1.1   |  | 1.000   |  | 107   | 39.1  | 146  |   |                            |      |
|  | 2308f22-002ams   |   | Гуре: МS   |   | Tes  |   |   | 146<br>8021B: Volati   | iles  |                            |      |
| Sample ID:   |  | Samp  | Гуре: <b>MS</b><br>h ID: <b>77</b> 1   | ;   |  |   | A Method  |  | iles  |                            |      |
| Sample ID:   | 2308f22-002ams   | Samp  | h ID: <b>771</b>   | 68  | F  | tCode: EF   | A Method  |  |   |                            |      |
| Sample ID:<br>Client ID:   | 2308f22-002ams<br>BH23-01 2.0'   | Samp <sup>-</sup><br>Batc   | h ID: <b>771</b>   | 68<br>30/2023   | F  | tCode: EF   | A Method  | 8021B: Volati  |   | RPDLimit                   | Qual |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte  | 2308f22-002ams<br>BH23-01 2.0'   | Samp<br>Batc<br>Analysis [  | h ID: <b>77</b> 1<br>Date: <b>8/</b> 3   | 68<br>30/2023   | F  | ttCode: EF<br>RunNo: 99<br>SeqNo: 36  | A Method<br>342<br>25940  | 8021B: Volati<br>Units: mg/K   | g   | RPDLimit                   | Qual |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene   | 2308f22-002ams<br>BH23-01 2.0'   | Samp <sup>-</sup><br>Batc<br>Analysis I<br>Result   | h ID: 771<br>Date: 8/:<br>PQL  | 68<br>30/2023<br>SPK value  | F<br>S<br>SPK Ref Val  | tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC   | PA Method<br>9342<br>935940<br>LowLimit   | <b>8021B: Volati</b><br>Units: <b>mg/K</b><br>HighLimit  | g   | RPDLimit                   | Qual |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene  | 2308f22-002ams<br>BH23-01 2.0'   | Samp<br>Batc<br>Analysis I<br>Result<br>1.0   | h ID: <b>771</b><br>Date: <b>8/:</b><br>PQL<br>0.023   | 68<br>30/2023<br>SPK value<br>0.9398  | F<br>SPK Ref Val<br>0  | tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106  | A Method<br>342<br>525940<br>LowLimit<br>70   | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130   | g   | RPDLimit                   | Qual |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene  | 2308f22-002ams<br>BH23-01 2.0'   | Samp<br>Batc<br>Analysis I<br>Result<br>1.0<br>1.0  | h ID: <b>771</b><br>Date: <b>8/</b><br>PQL<br>0.023<br>0.047   | 68<br>30/2023<br>SPK value<br>0.9398<br>0.9398  | F<br>SPK Ref Val<br>0<br>0   | tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106<br>108   | A Method<br>342<br>25940<br>LowLimit<br>70<br>70  | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130  | g   | RPDLimit                   | Qual |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total  | 2308f22-002ams<br>BH23-01 2.0'   | Samp<br>Batc<br>Analysis I<br>Result<br>1.0<br>1.0<br>1.0   | h ID: <b>77</b> 1<br>Date: <b>8/</b><br><u>PQL</u><br>0.023<br>0.047<br>0.047  | 68<br>30/2023<br>SPK value<br>0.9398<br>0.9398<br>0.9398  | F<br>SPK Ref Val<br>0<br>0<br>0  | tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106<br>108<br>109  | A Method<br>342<br>225940<br>LowLimit<br>70<br>70<br>70<br>70   | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130<br>130   | g   | RPDLimit                   | Qual |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Brome   | 2308f22-002ams<br>BH23-01 2.0'<br>8/29/2023  | Samp<br>Batc<br>Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.1<br>0.99  | h ID: <b>77</b> 1<br>Date: <b>8/</b><br><u>PQL</u><br>0.023<br>0.047<br>0.047  | 68<br>30/2023<br>SPK value<br>0.9398<br>0.9398<br>0.9398<br>2.820<br>0.9398   | F<br>SPK Ref Val<br>0<br>0<br>0<br>0   | tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106<br>108<br>109<br>110<br>105  | 24 Method<br>342<br>225940<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1  | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130  | g<br>%RPD   | RPDLimit                   | Qual |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Brome<br>Sample ID:   | 2308f22-002ams<br>BH23-01 2.0'<br>8/29/2023  | Samp<br>Batc<br>Analysis I<br>Result<br>1.0<br>1.0<br>3.1<br>0.99<br>Samp   | h ID: 771<br>Date: 8/3<br>PQL<br>0.023<br>0.047<br>0.047<br>0.094  | 68<br>30/2023<br>SPK value<br>0.9398<br>0.9398<br>0.9398<br>2.820<br>0.9398<br>2.820  | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>0<br>Tes   | tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106<br>108<br>109<br>110<br>105  | 2A Method<br>3342<br>525940<br>2000<br>70<br>70<br>70<br>70<br>70<br>39.1   | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>146   | g<br>%RPD   | RPDLimit                   | Qual |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Brome<br>Sample ID:   | 2308f22-002ams<br>BH23-01 2.0'<br>8/29/2023<br>ofluorobenzene<br>2308f22-002amsd                 | Samp<br>Batc<br>Analysis I<br>Result<br>1.0<br>1.0<br>3.1<br>0.99<br>Samp   | h ID: <b>771</b><br>Date: <b>8/3</b><br>PQL<br>0.023<br>0.047<br>0.047<br>0.094<br>Type: <b>MS</b><br>h ID: <b>771</b>             | 68<br>30/2023<br>SPK value<br>0.9398<br>0.9398<br>0.9398<br>2.820<br>0.9398<br>50<br>68   | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>F   | ttCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106<br>108<br>109<br>110<br>105   | A Method<br>342<br>225940<br>LowLimit<br>70<br>70<br>70<br>39.1<br>A Method<br>342  | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>146   | g<br>%RPD   | RPDLimit                   | Qual |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Bromo<br>Sample ID:<br>Client ID:   | 2308f22-002ams<br>BH23-01 2.0'<br>8/29/2023<br>ofluorobenzene<br>2308f22-002amsd<br>BH23-01 2.0' | Samp<br>Batc<br>Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.1<br>0.99<br>Samp<br>Batc  | h ID: <b>771</b><br>Date: <b>8/3</b><br>PQL<br>0.023<br>0.047<br>0.047<br>0.094<br>Type: <b>MS</b><br>h ID: <b>771</b>             | 68<br>30/2023<br>SPK value<br>0.9398<br>0.9398<br>2.820<br>0.9398<br>2.820<br>0.9398<br>50<br>68<br>30/2023   | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>F   | tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106<br>108<br>109<br>110<br>105<br>tCode: EF<br>RunNo: 99  | A Method<br>342<br>225940<br>LowLimit<br>70<br>70<br>70<br>39.1<br>A Method<br>342  | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volati  | g<br>%RPD   | RPDLimit                   | Qual |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Brome<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte  | 2308f22-002ams<br>BH23-01 2.0'<br>8/29/2023<br>ofluorobenzene<br>2308f22-002amsd<br>BH23-01 2.0' | Samp<br>Batc<br>Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.1<br>0.99<br>Samp<br>Batc<br>Analysis I  | h ID: 771<br>Date: 8/3<br>0.023<br>0.047<br>0.047<br>0.094<br>Type: MS<br>h ID: 771<br>Date: 8/3                                   | 68<br>30/2023<br>SPK value<br>0.9398<br>0.9398<br>2.820<br>0.9398<br>2.820<br>0.9398<br>50<br>68<br>30/2023   | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>0<br>Tes<br>F                                    | tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106<br>108<br>109<br>110<br>105<br>tCode: EF<br>RunNo: 99<br>SeqNo: 36                                       | A Method<br>342<br>225940<br>LowLimit<br>70<br>70<br>70<br>39.1<br>A Method<br>342<br>225941  | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volati<br>Units: mg/K                                   | g<br>%RPD<br>iles   |                            |      |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Bromo<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene   | 2308f22-002ams<br>BH23-01 2.0'<br>8/29/2023<br>ofluorobenzene<br>2308f22-002amsd<br>BH23-01 2.0' | Samp<br>Batc<br>Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.1<br>0.99<br>Samp<br>Batc<br>Analysis I<br>Result  | h ID: 771<br>Date: 8/3<br>PQL<br>0.023<br>0.047<br>0.047<br>0.094<br>Type: MS<br>h ID: 771<br>Date: 8/3<br>PQL                     | 68<br>30/2023<br>SPK value<br>0.9398<br>0.9398<br>2.820<br>0.9398<br>2.820<br>0.9398<br>5D<br>68<br>30/2023<br>SPK value  | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>F<br>SPK Ref Val                          | tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106<br>108<br>109<br>110<br>105<br>tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC                               | A Method<br>342<br>225940<br>LowLimit<br>70<br>70<br>70<br>39.1<br>A Method<br>342<br>225941<br>LowLimit  | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volati<br>Units: mg/K<br>HighLimit                      | 59<br>%RPD<br>iles<br>59<br>%RPD                                  | RPDLimit                   |      |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Bromo<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene                                  | 2308f22-002ams<br>BH23-01 2.0'<br>8/29/2023<br>ofluorobenzene<br>2308f22-002amsd<br>BH23-01 2.0' | Samp<br>Batc<br>Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.1<br>0.99<br>Samp<br>Batc<br>Analysis I<br>Result<br>0.97  | h ID: 771<br>Date: 8/3<br>0.023<br>0.047<br>0.047<br>0.094<br>Type: MS<br>h ID: 771<br>Date: 8/3<br>PQL<br>0.024                   | 68<br>30/2023<br>SPK value<br>0.9398<br>0.9398<br>0.9398<br>2.820<br>0.9398<br>2.820<br>0.9398<br>50<br>68<br>30/2023<br>SPK value<br>0.9407                              | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>F<br>SPK Ref Val<br>0                     | tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106<br>108<br>109<br>110<br>105<br>tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>104                        | A Method<br>342<br>225940<br>2000<br>200<br>70<br>70<br>70<br>70<br>39.1<br>A Method<br>342<br>25941<br>LowLimit<br>200   | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>146<br>8021B: Volati<br>Units: mg/K<br>HighLimit<br>130                      | 5g<br>%RPD<br>iles<br>5g<br>%RPD<br>2.56                          | RPDLimit<br>20             |      |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Brom<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene                   | 2308f22-002ams<br>BH23-01 2.0'<br>8/29/2023<br>ofluorobenzene<br>2308f22-002amsd<br>BH23-01 2.0' | Samp <sup>T</sup><br>Batc<br>Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.1<br>0.99<br>Samp <sup>T</sup><br>Batc<br>Analysis I<br>Result<br>0.97<br>0.98        | h ID: 771<br>Date: 8/3<br>0.023<br>0.047<br>0.047<br>0.094<br>Type: MS<br>h ID: 771<br>Date: 8/3<br>PQL<br>0.024<br>0.047          | 68<br>30/2023<br>SPK value<br>0.9398<br>0.9398<br>0.9398<br>2.820<br>0.9398<br>2.820<br>0.9398<br>50<br>68<br>30/2023<br>SPK value<br>0.9407<br>0.9407                    | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>5<br>SPK Ref Val<br>0<br>0                | ttCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106<br>108<br>109<br>110<br>105<br>ttCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>104<br>104               | A Method<br>342<br>225940<br>225940<br>70<br>70<br>70<br>70<br>39.1<br>A Method<br>342<br>225941<br>LowLimit<br>70<br>70<br>70<br>70  | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130        | 5 <b>g</b><br>%RPD<br>5 <b>iles</b><br>5 <b>g</b><br>2.56<br>2.91 | RPDLimit<br>20<br>20       |      |
| Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Brom<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total | 2308f22-002ams<br>BH23-01 2.0'<br>8/29/2023<br>ofluorobenzene<br>2308f22-002amsd<br>BH23-01 2.0' | Samp <sup>T</sup><br>Batc<br>Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.1<br>0.99<br>Samp <sup>T</sup><br>Batc<br>Analysis I<br>Result<br>0.97<br>0.98<br>1.0 | h ID: 771<br>Date: 8/3<br>0.023<br>0.047<br>0.047<br>0.094<br>Type: MS<br>h ID: 771<br>Date: 8/3<br>PQL<br>0.024<br>0.047<br>0.047 | 68<br>30/2023<br>SPK value<br>0.9398<br>0.9398<br>2.820<br>0.9398<br>2.820<br>0.9398<br>2.820<br>0.9398<br>50<br>68<br>30/2023<br>SPK value<br>0.9407<br>0.9407<br>0.9407 | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>0<br>Tes<br>5<br>SPK Ref Val<br>0<br>0<br>0<br>0 | ttCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106<br>108<br>109<br>110<br>105<br>ttCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>104<br>104<br>104<br>107 | 2A Method<br>342<br>225940<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1<br>2A Method<br>342<br>2325941<br>LowLimit<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70 | 8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volati<br>Units: mg/K<br>HighLimit<br>130<br>130<br>130 | 5g<br>%RPD<br>iles<br>5g<br>%RPD<br>2.56<br>2.91<br>1.91          | RPDLimit<br>20<br>20<br>20 |      |

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

| HALL<br>ENVIRONMENTAL<br>ANALYSIS<br>LABORATORY   | Hall Environmental .<br>Albu<br>TEL: 505-345-3975 .<br>Website: www.hal | 4901<br>querqu<br>FAX: 5 | Hawkins NE<br>1e. NM 87109<br>505-345-4107 | S   | San          | nple Log-In Check List              |
|---|---|--------------------------|--|-----|--------------|-------------------------------------|
| Client Name: Devon Energy   | Work Order Number:  | 2308                     | F22  |     |              | RcptNo: 1                           |
| Received By: Tracy Casarrubias  | 8/29/2023 7:55:00 AM  |                          |  |     |              |                                     |
| Completed By: Tracy Casarrubias   | 8/29/2023 9:08:29 AM  |                          |  |     |              |                                     |
| Reviewed By: 18-29-23   |   |                          |  |     |              |                                     |
| Chain of Custody  |   |                          |  |     |              |                                     |
| 1. Is Chain of Custody complete?  |   | Yes                      |  | No  | $\checkmark$ | Not Present                         |
| 2. How was the sample delivered?  |   | <u>Couri</u>             | ier  |     |              |                                     |
| Log In  |   |                          |  |     | _            |                                     |
| 3. Was an attempt made to cool the samples?   |   | Yes                      | $\checkmark$                               | No  |              | NA 🗌                                |
| 4. Were all samples received at a temperature of  | of >0° C to 6.0°C   | Yes                      | $\checkmark$                               | No  |              | NA 🗌                                |
| 5. Sample(s) in proper container(s)?  |   | Yes                      | $\checkmark$                               | No  |              |                                     |
| 6. Sufficient sample volume for indicated test(s)   | ?   | Yes                      |  | No  |              |                                     |
| 7. Are samples (except VOA and ONG) properly  | preserved?  | Yes                      |  | No  |              |                                     |
| 8. Was preservative added to bottles?   |   | Yes                      |  | No  | $\checkmark$ | NA 🗌                                |
| 9. Received at least 1 vial with headspace <1/4"  | for AQ VOA?   | Yes                      | _  | No  |              | NA 🔽                                |
| 10. Were any sample containers received broker  | <u>1</u> ?  | Yes                      |  | No  | $\checkmark$ | # of preserved<br>bottles checked   |
| 11. Does paperwork match bottle labels?<br>(Note discrepancies on chain of custody)       |   | Yes                      |  | No  |              | for pH:<br>(<2 or >12 unless noted) |
| 12. Are matrices correctly identified on Chain of C                                       | Sustody?  | Yes                      | $\checkmark$                               | No  |              | Adjusted?                           |
| 13. Is it clear what analyses were requested?   |   | Yes                      | $\checkmark$                               | No  |              |                                     |
| 14. Were all holding times able to be met?<br>(If no, notify customer for authorization.) |   | Yes                      |  | No  |              | Checked by: 2-8/29/23               |
| Special Handling (if applicable)  |   |                          |  |     |              |                                     |
| 15. Was client notified of all discrepancies with t                                       | nis order?  | Yes                      |  | No  |              | NA 🗹                                |
| Person Notified:<br>By Whom:<br>Regarding:<br>Client Instructions: Mailing address.p      | Date: Via:  | ] eMa<br>Fax ar          |  |     | Fax<br>C- TM | [] In Person<br>IC 8/29/23          |
| 16. Additional remarks:   |   |                          |  |     |              |                                     |
| 17. <u>Cooler Information</u><br>Cooler No Temp °C Condition Se<br>1 5.6 Good Yes         |   | eal Da                   | ate Sigr                                   | ned | Ву           |                                     |
| Page 1 of 1   |   |                          |  |     |              |                                     |

Page 82 of 138

| Received        | l by OCD                     | : 11/1/202         | 23 1:09:31 PM      |      |   |                 |       |               |   | I                                  |                   |                      |              |               |                             |                   |            |                 |                                 |                  |               | Page      | 83 of 138 |
|-----------------|------------------------------|--------------------|--------------------|------|---|-----------------|-------|---------------|---|------------------------------------|-------------------|----------------------|--------------|---------------|-----------------------------|-------------------|------------|-----------------|---------------------------------|------------------|---------------|-----------|-----------|
| С               | hain-                        | of-Cu              | stody Reco         | ord  | Turn-   | Around          |       |               |   |                                    |                   |                      | н            | A             | L                           | EN                | V          | IR              | 0                               | M                | EN            | ITA       | L         |
| Client:         | Ī                            | Devo               | n                  |      |   | tandard         |       | Rush          | 3 DAY   |                                    | ANALYSIS LABORATO |                      |              |               |                             |                   |            | <b>TOF</b>      | ۲S                              |                  |               |           |           |
|                 | N                            | rect               |                    |      | Proje   | ct Name         | Dan   | Hack          | berry 18  | www.hallenvironmental.com          |                   |                      |              |               |                             |                   |            |                 |                                 |                  |               |           |           |
| Mailing         | Address:                     |                    |                    |      | Distandard Rush 3 DAY<br>Project Name: Hackberry 18<br>BBBBB Fed 2 Bartlery |                 |       |               |   | 490                                | )1 Ha             | awki                 | ns N         | Ε-            |                             |                   |            |                 | 1 871                           | 09               |               |           |           |
| <b>6</b>        | . <u></u>                    |                    |                    |      | Proje   | ect #:<br>236   |       |               |   | Tel. 505-345-3975 Fax 505-345-4107 |                   |                      |              |               |                             |                   |            |                 |                                 |                  |               |           |           |
| Phone           | Phone #:                     |                    |                    |      |   |                 |       |               |   | Analysis Request                   |                   |                      |              |               |                             |                   |            |                 |                                 |                  |               |           |           |
| email o         | email or Fax#:               |                    |                    |      | Proje   | ect Mana<br>Ker | iger: | <u>.</u>      | 00 5  | 121)                               | DRO / MRO)        | _s                   |              | s             |                             | , SO4             |            |                 | sent                            |                  |               |           |           |
| QA/QC           | Package:                     |                    |                    |      |   | ner             | 10-0  | <b>p</b> ~/// |   | 80                                 | N/O               | PCB's                |              | SIM           |                             | PO4,              |            |                 | ItAb                            |                  |               |           |           |
| Star            |                              |                    | 🗆 Level 4 (Full Va |      | 0   | A               | A     |               |   | TMB's (8021)                       | NA<br>NA          |                      | ÷            | 8270SIMS      |                             | NO <sub>2</sub> , |            |                 | eser                            |                  |               |           |           |
| Accred<br>□ NEL |                              | □ Az Co<br>□ Other | mpliance           |      | Sam<br>On I   | pler: A         | V Ye  | s             | No uogi   | -                                  |                   | 8081 Pesticides/8082 | 504.1)       | 5             | S                           |                   |            | 8270 (Semi-VOA) | Total Coliform (Present/Absent) |                  |               |           |           |
|                 | AC<br>(Type)_                |                    |                    |      | # of  | # of Coolers: \ |       |               | MTBE  | TPH 8015D(GRO                      | icide             | por                  | PAHs by 8310 | RCRA 8 Metals | CI F, Br, NO <sub>3</sub> , | R                 | ni-<       | E L             | 2                               |                  |               |           |           |
|                 |                              |                    |                    |      |   |                 |       |               | 015[  | best                               | Meti              | by 8                 | 8 4          | Ъ             | Š                           | (Ser              | Colit      |                 |                                 |                  |               |           |           |
|                 |                              |                    |                    |      | Con   | lainer          | Prese | ervative      |   | BTEX                               | E                 | 81                   | EDB (Method  | AHs           | CRA                         | Ľ,                | 8260 (VOA) | 270             | otal                            |                  |               |           |           |
| Date            | Time                         | Matrix             | Sample Name        |      |   | e and #         | Туре  | 1.01          | 2308F22   |                                    | 戶                 | 80                   | Ξ            | <u> </u>      | <u>~</u> {                  | 2                 | 8          | 60              |                                 |                  |               | +         | +-+       |
| 8-18-23         | 0900                         | So,1               | BH23-01            | 0.0  | 4   | 02              | 10    | E             | 001   | П                                  | μ-                |                      |              |               |                             | +                 |            |                 |                                 | _+               |               | _         | +-+-      |
|                 | 0910                         | 1                  | BH23-01            | 2.0  |   | 1               | 1.5   |               | 002   | $\downarrow$                       | Ļ                 |                      |              |               |                             | +                 |            |                 |                                 | _                |               | -         | +-+-      |
|                 | 0920                         |                    | BH-23-02           | 0.0  |   |                 |       |               | 003   |                                    | $\square$         |                      |              |               |                             | -+-               |            |                 |                                 |                  | +             | -         | ┿┿┙       |
|                 | 0930                         |                    | RH23-02            | 2.0  |   |                 |       |               | 004   | $\square$                          | $\square$         |                      |              |               |                             | 4                 | _          | -               |                                 | -                |               | +         | ┥┥┥┙      |
|                 | 0940                         |                    | BH23-03            | 0.0  |   |                 | 20.10 |               | 005   |                                    | 11                |                      |              |               | 15 m                        | -                 | - 19       |                 |                                 | -+               | $\rightarrow$ |           | +         |
|                 | 0950                         |                    | BH23-03            | 2.0  |   |                 |       |               | 006   | $\square$                          | $\downarrow$      |                      |              | -             |                             |                   |            |                 |                                 |                  |               | <u></u>   | ┼╌┼─╴     |
|                 | 1000                         |                    | B1+23-04           | 0.0  |   |                 |       |               | 607   | 11-                                |                   | -                    |              |               |                             |                   |            | -               |                                 | $\vdash$         | -             |           | ╈╋        |
|                 | 1010                         |                    | BIT23-04           | 20   |   |                 | 1.1.1 |               | 008   |                                    | $\parallel$       | -                    | -            | - 0           |                             |                   | -          | -               |                                 | $\vdash$         |               |           |           |
|                 | 1020                         |                    | BH23-05            | 0.0  |   |                 |       |               | 009   | $\parallel$                        | +                 | -                    |              |               | 100,000                     |                   |            | -               | -                               |                  |               | _         | +         |
|                 | 1030                         |                    | B1723-05           | Z.0' |   |                 |       |               | 010   |                                    |                   |                      |              | -             |                             | H                 | -          | -               | -                               |                  | +             |           | +-+-      |
| 1               | 1040                         | 1                  | BH23-06            | 0.0  |   | 1               |       | 11-           | 011   |                                    | H                 | -                    |              |               | -                           | V                 | -          | -               | -                               | $\left  \right $ | -+-           |           | +-+-      |
| V               | 1050                         |                    | BH23-06            | 20'  |   | V               | 16-   | <b>V</b>      | Date Time   |                                    | marl              | <u>(s</u> .          | 1            |               | 1                           | -                 |            | <u> </u>        |                                 |                  |               |           |           |
| Date:           | Time:                        | Relinquis          | hed by:            |      |   | eived by:       | Via   |               | nll   |                                    | anan              | ι <u>σ</u> .         | I            | 1:            | Ks                          | the.              | 1          | 22              | CI                              | ICT I            | rexe          | CG        |           |
|                 | Date: Time: Relinquished by: |                    |                    |      | Received by: Via Course Date Time   |                 |       |               | Remarks:<br>Ch: Kstallings@vertex.cg<br>ahoms@vertex.cg |                                    |                   |                      |              |               |                             |                   |            |                 |                                 |                  |               |           |           |
| Date:           | Time:                        |                    |                    |      | 7:11  |                 |       |               |   |                                    |                   |                      |              |               |                             |                   |            |                 |                                 |                  |               |           |           |
| 11613           | Propos poor acrimon          |                    |                    |      | X   | 1               |       | 4             | 8/29/23   |                                    |                   |                      |              |               | ad dat                      |                   |            | arly no         | tated o                         | n the a          | nalvtica      | i report. |           |

Released to Imaging: 3/3/2024 11:07:34 AM

| <b>Received by OCD: 11/1/2023 1:09:31 PM</b>   |  | Page 84 of 1.   |
|--|--|---|
| Chain-of-Custody Record  | Turn-Around Time:<br>D Standard Rush <u>3</u> DAY<br>Project Name:<br>Hackberry 18<br>Fel 2 Battery<br>Project #:<br>23E-03903   | HALL ENVIRONMENTAL<br>ANALYSIS LABORATORY   |
| Direct Bill  | Project Name:  | www.hallenvironmental.com   |
| Mailing Address:   | Hackberry 18 Her   | 4901 Hawkins NE - Albuquerque, NM 87109   |
|  | Project #:   | Tel. 505-345-3975 Fax 505-345-4107  |
|  | - 23E-03903  | Analysis Request  |
| Phone #:<br>email or Fax#:   |  |   |
| QA/QC Package:   | Project Manager:   | MRC 2021  |
| □ Standard □ Level 4 (Full Validation)   | ,  | 's (802<br>PCB's PCB's PCB's NI PCB's P |
| Accreditation:   Accreditation:  Accreditation | Sampler:   | BTEX) MTBE / TMB's (8021)<br>TPH:8015D(GRO / DRO / MRO)<br>8081 Pesticides/8082 PCB's<br>EDB (Method 504.1)<br>PAHs by 8310 or 8270SIMS<br>RCRA 8 Metals<br>RCRA 8 Metals<br>RCRA 8 Metals<br>CJ F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub><br>8260 (VOA)<br>8260 (VOA)<br>10tal Coliform (Present/Absent)<br>Total Coliform (Present/Absent)   |
| NELAC      Other   | On loo: IV Yes I No 1100   | BTEX) MTBE / TMB<br>TPH:8015D(GRO / DR<br>8081 Pesticides/8082<br>EDB (Method 504.1)<br>PAHs by 8310 or 827<br>RCRA 8 Metals<br>CH F, Br, NO <sub>3</sub> , NO <sub>2</sub><br>8260 (VOA)<br>8260 (VOA)<br>8270 (Semi-VOA)<br>Total Coliform (Prese   |
| EDD (Type)   | # of Coolers: 1<br>Cooler Temp(including CF): 5.7-0.1= 5.6 (°C)  | MTBE /<br>I5D(GResticides<br>ethod 5/<br>ethod 5/<br>S Metals<br>S Metals<br>S Metals<br>(OA)<br>(OA)<br>(OA)<br>(emi-VO  |
|  |  | BTEX) MTBE /<br>TPH:8015D(GRO<br>8081 Pesticides/<br>EDB (Method 50<br>PAHs by 8310 ol<br>RCRA 8 Metals<br>CH F, Br, NO <sub>3</sub> ,<br>8260 (VOA)<br>8270 (Semi-VOA<br>Total Coliform (P   |
|  | Container Preservative HEAL No.  | BTEX)<br>8081 Pe<br>EDB (M<br>PAHs b<br>RCRA 8<br>8270 (S<br>S270 (S<br>Ch F, E<br>Total C  |
| Date Time Matrix Sample Name   | 11.0   |   |
| 218-23 1100 So./ BH23-07   | 402 ICE 013  |   |
| 1110 BH23-07   | 1 014  |   |
| 1120 BH23-08   | 1 015  |   |
| V 1130 V BH23-08   | V V OIG  | V V   |
|  | <ul> <li>Anno 1990 Anno 1990 Ann</li></ul> |   |
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| Date: Time: Relinquished by:   | Received by: Via: Date Time  | Remarks: 1. Ks tellings Director ce   |
|  | armining 8/20/23 845   | Remarks: CL: Kstallings Overtex cq<br>a harris @ vertex ca  |
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| 128/23 1900 acumus   | 3/29/27 7:55   |   |



September 11, 2023

Kent Stallings Vertex Resources Services, Inc. 3101 Boyd Drive Carlsbad, NM 88220 TEL: FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

RE: Hackberry 18

OrderNo.: 2308F19

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 15 sample(s) on 8/29/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-09 0 **Project:** Hackberry 18 Collection Date: 8/19/2023 9:00:00 AM Lab ID: 2308F19-001 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: PRD Diesel Range Organics (DRO) ND 8.6 mg/Kg 1 8/31/2023 9:57:59 PM Motor Oil Range Organics (MRO) ND 43 mg/Kg 1 8/31/2023 9:57:59 PM Surr: DNOP 94.9 69-147 %Rec 1 8/31/2023 9:57:59 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 4:52:30 AM 4.8 mg/Kg 1 Surr: BFB 92.9 15-244 %Rec 1 8/31/2023 4:52:30 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 4:52:30 AM 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 1 8/31/2023 4:52:30 AM Ethylbenzene ND 0.048 mg/Kg 1 8/31/2023 4:52:30 AM Xylenes, Total ND 0.095 mg/Kg 1 8/31/2023 4:52:30 AM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 8/31/2023 4:52:30 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 5:03:26 PM 110 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

P Sample pH Not In Range RL Reporting Limit

Page 1 of 23

**CLIENT:** Vertex Resources Services, Inc.

Hackberry 18

**Analytical Report** Lab Order 2308F19

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-09 2' Collection Date: 8/19/2023 9:15:00 AM Received Date: 8/29/2023 7:55:00 AM

| Lab ID: 2308F19-002              | Matrix: SOIL | Received Date: 8/29/2023 7:55:00 AM |          |    |                       |  |  |  |
|----------------------------------|--------------|-------------------------------------|----------|----|-----------------------|--|--|--|
| Analyses                         | Result       | RL Qu                               | al Units | DF | Date Analyzed         |  |  |  |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANICS     |                                     |          |    | Analyst: PRD          |  |  |  |
| Diesel Range Organics (DRO)      | ND           | 9.2                                 | mg/Kg    | 1  | 8/31/2023 10:09:13 PM |  |  |  |
| Motor Oil Range Organics (MRO)   | ND           | 46                                  | mg/Kg    | 1  | 8/31/2023 10:09:13 PM |  |  |  |
| Surr: DNOP                       | 92.5         | 69-147                              | %Rec     | 1  | 8/31/2023 10:09:13 PM |  |  |  |
| EPA METHOD 8015D: GASOLINE RANGI | E            |                                     |          |    | Analyst: JJP          |  |  |  |
| Gasoline Range Organics (GRO)    | ND           | 4.8                                 | mg/Kg    | 1  | 8/31/2023 5:15:55 AM  |  |  |  |
| Surr: BFB                        | 94.1         | 15-244                              | %Rec     | 1  | 8/31/2023 5:15:55 AM  |  |  |  |
| EPA METHOD 8021B: VOLATILES      |              |                                     |          |    | Analyst: JJP          |  |  |  |
| Benzene                          | ND           | 0.024                               | mg/Kg    | 1  | 8/31/2023 5:15:55 AM  |  |  |  |
| Toluene                          | ND           | 0.048                               | mg/Kg    | 1  | 8/31/2023 5:15:55 AM  |  |  |  |
| Ethylbenzene                     | ND           | 0.048                               | mg/Kg    | 1  | 8/31/2023 5:15:55 AM  |  |  |  |
| Xylenes, Total                   | ND           | 0.096                               | mg/Kg    | 1  | 8/31/2023 5:15:55 AM  |  |  |  |
| Surr: 4-Bromofluorobenzene       | 105          | 39.1-146                            | %Rec     | 1  | 8/31/2023 5:15:55 AM  |  |  |  |
| EPA METHOD 300.0: ANIONS         |              |                                     |          |    | Analyst: RBC          |  |  |  |
| Chloride                         | 300          | 60                                  | mg/Kg    | 20 | 8/31/2023 5:15:51 PM  |  |  |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

\* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 2 of 23

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-10 0 **Project:** Hackberry 18 Collection Date: 8/19/2023 9:30:00 AM Lab ID: 2308F19-003 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 8/31/2023 10:20:23 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/31/2023 10:20:23 PM Surr: DNOP 107 69-147 %Rec 1 8/31/2023 10:20:23 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 5:39:14 AM 4.9 mg/Kg 1 Surr: BFB 95.8 15-244 %Rec 1 8/31/2023 5:39:14 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 5:39:14 AM 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/31/2023 5:39:14 AM Ethylbenzene ND 0.049 mg/Kg 1 8/31/2023 5:39:14 AM Xylenes, Total ND 0.098 mg/Kg 1 8/31/2023 5:39:14 AM Surr: 4-Bromofluorobenzene 107 39.1-146 %Rec 1 8/31/2023 5:39:14 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 5:28:15 PM 120 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL

Practical Quanitative Limit S

% Recovery outside of standard limits. If undiluted results may be estimated.

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 3 of 23

**CLIENT:** Vertex Resources Services, Inc.

Hackberry 18

**Analytical Report** Lab Order 2308F19

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-10 2' Collection Date: 8/19/2023 9:45:00 AM **Deceived Deter** 8/20/2022 7:55:00 AM

| Lab ID: 2308F19-004             | Matrix: SOIL | Rece     | Received Date: 8/29/2023 7:55:00 AM |    |                       |  |  |  |  |  |
|---------------------------------|--------------|----------|-------------------------------------|----|-----------------------|--|--|--|--|--|
| Analyses                        | Result       | RL Qu    | al Units                            | DF | Date Analyzed         |  |  |  |  |  |
| EPA METHOD 8015M/D: DIESEL RANG | E ORGANICS   |          |                                     |    | Analyst: PRD          |  |  |  |  |  |
| Diesel Range Organics (DRO)     | ND           | 9.5      | mg/Kg                               | 1  | 8/31/2023 10:31:40 PM |  |  |  |  |  |
| Motor Oil Range Organics (MRO)  | ND           | 47       | mg/Kg                               | 1  | 8/31/2023 10:31:40 PM |  |  |  |  |  |
| Surr: DNOP                      | 94.1         | 69-147   | %Rec                                | 1  | 8/31/2023 10:31:40 PM |  |  |  |  |  |
| EPA METHOD 8015D: GASOLINE RANG | <b>E</b>     |          |                                     |    | Analyst: JJP          |  |  |  |  |  |
| Gasoline Range Organics (GRO)   | ND           | 4.9      | mg/Kg                               | 1  | 8/31/2023 6:02:43 AM  |  |  |  |  |  |
| Surr: BFB                       | 94.7         | 15-244   | %Rec                                | 1  | 8/31/2023 6:02:43 AM  |  |  |  |  |  |
| EPA METHOD 8021B: VOLATILES     |              |          |                                     |    | Analyst: JJP          |  |  |  |  |  |
| Benzene                         | ND           | 0.024    | mg/Kg                               | 1  | 8/31/2023 6:02:43 AM  |  |  |  |  |  |
| Toluene                         | ND           | 0.049    | mg/Kg                               | 1  | 8/31/2023 6:02:43 AM  |  |  |  |  |  |
| Ethylbenzene                    | ND           | 0.049    | mg/Kg                               | 1  | 8/31/2023 6:02:43 AM  |  |  |  |  |  |
| Xylenes, Total                  | ND           | 0.097    | mg/Kg                               | 1  | 8/31/2023 6:02:43 AM  |  |  |  |  |  |
| Surr: 4-Bromofluorobenzene      | 107          | 39.1-146 | %Rec                                | 1  | 8/31/2023 6:02:43 AM  |  |  |  |  |  |
| EPA METHOD 300.0: ANIONS        |              |          |                                     |    | Analyst: RBC          |  |  |  |  |  |
| Chloride                        | 180          | 60       | mg/Kg                               | 20 | 8/31/2023 5:40:40 PM  |  |  |  |  |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 23

Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Hackberry 18

2308F19-005

**Analytical Report** Lab Order 2308F19

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-11 0' Collection Date: 8/19/2023 10:00:00 AM Received Date: 8/29/2023 7:55:00 AM

| Analyses                             | Result | RL (     | Qual Units | DF | Date Analyzed         |
|--------------------------------------|--------|----------|------------|----|-----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE ORG | GANICS |          |            |    | Analyst: PRD          |
| Diesel Range Organics (DRO)          | ND     | 9.8      | mg/Kg      | 1  | 8/31/2023 10:42:51 PM |
| Motor Oil Range Organics (MRO)       | ND     | 49       | mg/Kg      | 1  | 8/31/2023 10:42:51 PM |
| Surr: DNOP                           | 99.5   | 69-147   | %Rec       | 1  | 8/31/2023 10:42:51 PM |
| EPA METHOD 8015D: GASOLINE RANGE     |        |          |            |    | Analyst: JJP          |
| Gasoline Range Organics (GRO)        | ND     | 4.8      | mg/Kg      | 1  | 8/31/2023 5:27:32 PM  |
| Surr: BFB                            | 98.9   | 15-244   | %Rec       | 1  | 8/31/2023 5:27:32 PM  |
| EPA METHOD 8021B: VOLATILES          |        |          |            |    | Analyst: JJP          |
| Benzene                              | ND     | 0.024    | mg/Kg      | 1  | 8/31/2023 5:27:32 PM  |
| Toluene                              | ND     | 0.048    | mg/Kg      | 1  | 8/31/2023 5:27:32 PM  |
| Ethylbenzene                         | ND     | 0.048    | mg/Kg      | 1  | 8/31/2023 5:27:32 PM  |
| Xylenes, Total                       | ND     | 0.097    | mg/Kg      | 1  | 8/31/2023 5:27:32 PM  |
| Surr: 4-Bromofluorobenzene           | 108    | 39.1-146 | %Rec       | 1  | 8/31/2023 5:27:32 PM  |
| EPA METHOD 300.0: ANIONS             |        |          |            |    | Analyst: SNS          |
| Chloride                             | 2300   | 150      | mg/Kg      | 50 | 9/1/2023 7:36:56 AM   |
|                                      |        |          |            |    |                       |

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 5 of 23

**CLIENT:** Vertex Resources Services, Inc.

Hackberry 18

**Analytical Report** Lab Order 2308F19

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-11 2' Collection Date: 8/19/2023 10:15:00 AM Received Date: 8/29/2023 7:55:00 AM

| Lab ID: 2308F19-006              | Matrix: SOIL | <b>Received Date:</b> 8/29/2023 7:55:00 AM |          |    |                       |  |  |  |
|----------------------------------|--------------|--|----------|----|-----------------------|--|--|--|
| Analyses                         | Result       | RL Qu                                      | al Units | DF | Date Analyzed         |  |  |  |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANICS     |  |          |    | Analyst: PRD          |  |  |  |
| Diesel Range Organics (DRO)      | ND           | 9.9  | mg/Kg    | 1  | 8/31/2023 10:54:01 PM |  |  |  |
| Motor Oil Range Organics (MRO)   | ND           | 49   | mg/Kg    | 1  | 8/31/2023 10:54:01 PM |  |  |  |
| Surr: DNOP                       | 101          | 69-147                                     | %Rec     | 1  | 8/31/2023 10:54:01 PM |  |  |  |
| EPA METHOD 8015D: GASOLINE RANGI | E            |  |          |    | Analyst: JJP          |  |  |  |
| Gasoline Range Organics (GRO)    | ND           | 4.9  | mg/Kg    | 1  | 8/31/2023 5:51:29 PM  |  |  |  |
| Surr: BFB                        | 100          | 15-244                                     | %Rec     | 1  | 8/31/2023 5:51:29 PM  |  |  |  |
| EPA METHOD 8021B: VOLATILES      |              |  |          |    | Analyst: JJP          |  |  |  |
| Benzene                          | ND           | 0.025                                      | mg/Kg    | 1  | 8/31/2023 5:51:29 PM  |  |  |  |
| Toluene                          | ND           | 0.049                                      | mg/Kg    | 1  | 8/31/2023 5:51:29 PM  |  |  |  |
| Ethylbenzene                     | ND           | 0.049                                      | mg/Kg    | 1  | 8/31/2023 5:51:29 PM  |  |  |  |
| Xylenes, Total                   | ND           | 0.098                                      | mg/Kg    | 1  | 8/31/2023 5:51:29 PM  |  |  |  |
| Surr: 4-Bromofluorobenzene       | 110          | 39.1-146                                   | %Rec     | 1  | 8/31/2023 5:51:29 PM  |  |  |  |
| EPA METHOD 300.0: ANIONS         |              |  |          |    | Analyst: RBC          |  |  |  |
| Chloride                         | 1000         | 60   | mg/Kg    | 20 | 8/31/2023 6:05:29 PM  |  |  |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

ND PQL Practical Quanitative Limit

- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 6 of 23

**Project:** Hackberry 18

**CLIENT:** Vertex Resources Services, Inc.

Analytical Report Lab Order 2308F19

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-12 0' Collection Date: 8/19/2023 10:30:00 AM Received Date: 8/29/2023 7:55:00 AM

| Lab ID: 2308F19-007              | Matrix: SOIL | R        | eceive | ed Date: | 8/29/2 | 023 7:55:00 AM        |
|----------------------------------|--------------|----------|--------|----------|--------|-----------------------|
| Analyses                         | Result       | RL       | Qual   | Units    | DF     | Date Analyzed         |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANICS     |          |        |          |        | Analyst: PRD          |
| Diesel Range Organics (DRO)      | 2700         | 100      |        | mg/Kg    | 10     | 8/31/2023 11:05:10 PM |
| Motor Oil Range Organics (MRO)   | 3500         | 500      |        | mg/Kg    | 10     | 8/31/2023 11:05:10 PM |
| Surr: DNOP                       | 0            | 69-147   | S      | %Rec     | 10     | 8/31/2023 11:05:10 PM |
| EPA METHOD 8015D: GASOLINE RANG  | E            |          |        |          |        | Analyst: JJP          |
| Gasoline Range Organics (GRO)    | ND           | 4.8      |        | mg/Kg    | 1      | 8/31/2023 6:15:21 PM  |
| Surr: BFB                        | 95.6         | 15-244   |        | %Rec     | 1      | 8/31/2023 6:15:21 PM  |
| EPA METHOD 8021B: VOLATILES      |              |          |        |          |        | Analyst: JJP          |
| Benzene                          | ND           | 0.024    |        | mg/Kg    | 1      | 8/31/2023 6:15:21 PM  |
| Toluene                          | ND           | 0.048    |        | mg/Kg    | 1      | 8/31/2023 6:15:21 PM  |
| Ethylbenzene                     | ND           | 0.048    |        | mg/Kg    | 1      | 8/31/2023 6:15:21 PM  |
| Xylenes, Total                   | ND           | 0.097    |        | mg/Kg    | 1      | 8/31/2023 6:15:21 PM  |
| Surr: 4-Bromofluorobenzene       | 104          | 39.1-146 |        | %Rec     | 1      | 8/31/2023 6:15:21 PM  |
| EPA METHOD 300.0: ANIONS         |              |          |        |          |        | Analyst: SNS          |
| Chloride                         | 8200         | 300      |        | mg/Kg    | 100    | 9/1/2023 7:49:21 AM   |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

\* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 9/11/2023

8/31/2023 6:50:48 PM

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-12 2' **Project:** Hackberry 18 Collection Date: 8/19/2023 10:45:00 AM Lab ID: 2308F19-008 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 8/31/2023 11:46:23 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/31/2023 11:46:23 PM Surr: DNOP 124 69-147 %Rec 1 8/31/2023 11:46:23 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 6:39:08 PM 5.0 mg/Kg 1 Surr: BFB 97.6 15-244 %Rec 1 8/31/2023 6:39:08 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 6:39:08 PM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 8/31/2023 6:39:08 PM Ethylbenzene ND 0.050 mg/Kg 1 8/31/2023 6:39:08 PM Xylenes, Total ND mg/Kg 1 8/31/2023 6:39:08 PM 0.10 Surr: 4-Bromofluorobenzene 108 39.1-146 %Rec 1 8/31/2023 6:39:08 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS

300

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Chloride

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL

Practical Quanitative Limit S

% Recovery outside of standard limits. If undiluted results may be estimated.

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

mg/Kg

20

60

Р Sample pH Not In Range

RL Reporting Limit Page 8 of 23

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-12 3.5' **Project:** Hackberry 18 Collection Date: 8/19/2023 11:00:00 AM Lab ID: 2308F19-009 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) 210 9.3 mg/Kg 1 9/1/2023 1:57:19 PM Motor Oil Range Organics (MRO) 220 46 mg/Kg 1 9/1/2023 1:57:19 PM Surr: DNOP 117 69-147 %Rec 1 9/1/2023 1:57:19 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 7:02:50 PM 5.0 mg/Kg 1 Surr: BFB 97.4 15-244 %Rec 1 8/31/2023 7:02:50 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 7:02:50 PM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 8/31/2023 7:02:50 PM Ethylbenzene ND 0.050 mg/Kg 1 8/31/2023 7:02:50 PM Xylenes, Total ND mg/Kg 1 8/31/2023 7:02:50 PM 0.099 Surr: 4-Bromofluorobenzene 107 39.1-146 %Rec 1 8/31/2023 7:02:50 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 8/31/2023 7:28:02 PM 830 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL

Practical Quanitative Limit S

% Recovery outside of standard limits. If undiluted results may be estimated.

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 9 of 23

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-12 4' **Project:** Hackberry 18 Collection Date: 8/19/2023 11:15:00 AM Lab ID: 2308F19-010 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) 13 9.2 mg/Kg 1 9/1/2023 12:19:34 AM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 9/1/2023 12:19:34 AM Surr: DNOP 126 69-147 %Rec 1 9/1/2023 12:19:34 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 7:26:32 PM 4.9 mg/Kg 1 Surr: BFB 96.4 15-244 %Rec 1 8/31/2023 7:26:32 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 7:26:32 PM 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/31/2023 7:26:32 PM Ethylbenzene ND 0.049 mg/Kg 1 8/31/2023 7:26:32 PM Xylenes, Total ND 0.097 mg/Kg 1 8/31/2023 7:26:32 PM Surr: 4-Bromofluorobenzene 107 39.1-146 %Rec 1 8/31/2023 7:26:32 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 8/31/2023 7:40:26 PM 540 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

POL

Practical Quanitative Limit S

% Recovery outside of standard limits. If undiluted results may be estimated.

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 10 of 23

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-13 0' **Project:** Hackberry 18 Collection Date: 8/19/2023 11:30:00 AM Lab ID: 2308F19-011 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) 4900 100 mg/Kg 10 9/1/2023 12:30:37 AM Motor Oil Range Organics (MRO) 3700 500 mg/Kg 10 9/1/2023 12:30:37 AM Surr: DNOP 0 69-147 S %Rec 10 9/1/2023 12:30:37 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 7:50:12 PM 4.9 mg/Kg 1 Surr: BFB 129 15-244 %Rec 1 8/31/2023 7:50:12 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 7:50:12 PM 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/31/2023 7:50:12 PM Ethylbenzene ND 0.049 mg/Kg 1 8/31/2023 7:50:12 PM Xylenes, Total ND 0.097 mg/Kg 1 8/31/2023 7:50:12 PM Surr: 4-Bromofluorobenzene 110 39.1-146 %Rec 1 8/31/2023 7:50:12 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/1/2023 8:01:45 AM 9200 600 200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit

RL

Page 11 of 23

Date Reported: 9/11/2023

8/31/2023 8:05:15 PM

20

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-13 1' **Project:** Hackberry 18 Collection Date: 8/19/2023 11:45:00 AM Lab ID: 2308F19-012 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.8 mg/Kg 1 9/1/2023 1:11:37 AM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 9/1/2023 1:11:37 AM Surr: DNOP 109 69-147 %Rec 1 9/1/2023 1:11:37 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 8:37:32 PM 4.7 mg/Kg 1 Surr: BFB 95.4 15-244 %Rec 1 8/31/2023 8:37:32 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 8:37:32 PM 0.023 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 8/31/2023 8:37:32 PM Ethylbenzene ND 0.047 mg/Kg 1 8/31/2023 8:37:32 PM Xylenes, Total ND 0.093 mg/Kg 1 8/31/2023 8:37:32 PM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 8/31/2023 8:37:32 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg

320

60

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Chloride

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

Analyte detected in the associated Method Blank в

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 12 of 23

Released to Imaging: 3/5/2024 11:07:34 AM

**EPA METHOD 300.0: ANIONS** 

Chloride

Analytical Report Lab Order 2308F19

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-13 4' **Project:** Hackberry 18 Collection Date: 8/19/2023 1:00:00 PM Lab ID: 2308F19-013 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) 12 9.3 mg/Kg 1 9/1/2023 1:22:42 AM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 9/1/2023 1:22:42 AM Surr: DNOP 112 69-147 %Rec 1 9/1/2023 1:22:42 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 9:01:05 PM 5.0 mg/Kg 1 Surr: BFB 95.1 15-244 %Rec 1 8/31/2023 9:01:05 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 9:01:05 PM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 8/31/2023 9:01:05 PM Ethylbenzene ND 0.050 mg/Kg 1 8/31/2023 9:01:05 PM Xylenes, Total ND mg/Kg 1 8/31/2023 9:01:05 PM 0.099 Surr: 4-Bromofluorobenzene 105 39.1-146 %Rec 1 8/31/2023 9:01:05 PM

330

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

mg/Kg

20

60

P Sample pH Not In Range

RL Reporting Limit

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Analyst: SNS

8/31/2023 8:42:30 PM

**CLIENT:** Vertex Resources Services, Inc.

Hackberry 18

**Analytical Report** Lab Order 2308F19

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-14 0' Collection Date: 8/19/2023 1:15:00 PM Received Date: 8/29/2023 7:55:00 AM

| Lab ID: 2308F19-014              | Matrix: SOIL | Rece     | eived Date: | 8/29/2 | 023 7:55:00 AM       |
|----------------------------------|--------------|----------|-------------|--------|----------------------|
| Analyses                         | Result       | RL Qu    | al Units    | DF     | Date Analyzed        |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANICS     |          |             |        | Analyst: PRD         |
| Diesel Range Organics (DRO)      | ND           | 9.6      | mg/Kg       | 1      | 9/1/2023 1:33:45 AM  |
| Motor Oil Range Organics (MRO)   | ND           | 48       | mg/Kg       | 1      | 9/1/2023 1:33:45 AM  |
| Surr: DNOP                       | 127          | 69-147   | %Rec        | 1      | 9/1/2023 1:33:45 AM  |
| EPA METHOD 8015D: GASOLINE RANG  | E            |          |             |        | Analyst: JJP         |
| Gasoline Range Organics (GRO)    | ND           | 5.0      | mg/Kg       | 1      | 8/31/2023 9:24:41 PM |
| Surr: BFB                        | 96.6         | 15-244   | %Rec        | 1      | 8/31/2023 9:24:41 PM |
| EPA METHOD 8021B: VOLATILES      |              |          |             |        | Analyst: JJP         |
| Benzene                          | ND           | 0.025    | mg/Kg       | 1      | 8/31/2023 9:24:41 PM |
| Toluene                          | ND           | 0.050    | mg/Kg       | 1      | 8/31/2023 9:24:41 PM |
| Ethylbenzene                     | ND           | 0.050    | mg/Kg       | 1      | 8/31/2023 9:24:41 PM |
| Xylenes, Total                   | ND           | 0.10     | mg/Kg       | 1      | 8/31/2023 9:24:41 PM |
| Surr: 4-Bromofluorobenzene       | 107          | 39.1-146 | %Rec        | 1      | 8/31/2023 9:24:41 PM |
| EPA METHOD 300.0: ANIONS         |              |          |             |        | Analyst: SNS         |
| Chloride                         | 2100         | 60       | mg/Kg       | 20     | 8/31/2023 8:54:54 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 9/11/2023

9/1/2023 8:14:10 AM

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-14 2' **Project:** Hackberry 18 Collection Date: 8/19/2023 1:30:00 PM Lab ID: 2308F19-015 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 9/1/2023 1:44:47 AM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 9/1/2023 1:44:47 AM Surr: DNOP 94.0 69-147 %Rec 1 9/1/2023 1:44:47 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 10:11:38 PM 5.0 mg/Kg 1 Surr: BFB 92.5 15-244 %Rec 1 8/31/2023 10:11:38 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 10:11:38 PM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 8/31/2023 10:11:38 PM Ethylbenzene ND 0.050 mg/Kg 1 8/31/2023 10:11:38 PM Xylenes, Total ND mg/Kg 1 8/31/2023 10:11:38 PM 0.099 Surr: 4-Bromofluorobenzene 102 39.1-146 %Rec 1 8/31/2023 10:11:38 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS

2200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Chloride

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

mg/Kg

50

150

Р Sample pH Not In Range RL

Reporting Limit

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| Client:<br>Project: | Vertex R<br>Hackberr | esources Services<br>y 18 | , Inc.    |             |                   |           |               |      |          |      |
|---------------------|----------------------|---------------------------|-----------|-------------|-------------------|-----------|---------------|------|----------|------|
| Sample ID:          | MB-77235             | SampType: MI              | BLK       | Tes         | tCode: EF         | PA Method | 300.0: Anions |      |          |      |
| Client ID:          | PBS                  | Batch ID: 77              | 235       | F           | RunNo: <b>9</b> 9 | 9401      |               |      |          |      |
| Prep Date:          | 8/31/2023            | Analysis Date: 8/         | /31/2023  | S           | SeqNo: 36         | 627541    | Units: mg/Kg  | 9    |          |      |
| Analyte             |                      | Result PQL                | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD | RPDLimit | Qual |
| Chloride            |                      | ND 1.5                    |           |             |                   |           |               |      |          |      |
| Sample ID:          | LCS-77235            | SampType: LC              | s         | Tes         | tCode: EF         | PA Method | 300.0: Anions |      |          |      |
| Client ID:          | LCSS                 | Batch ID: 77              | 235       | F           | RunNo: <b>9</b> 9 | 9401      |               |      |          |      |
| Prep Date:          | 8/31/2023            | Analysis Date: 8/         | /31/2023  | S           | SeqNo: 36         | 627543    | Units: mg/Kg  | 9    |          |      |
| Analyte             |                      | Result PQL                | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD | RPDLimit | Qual |
| Chloride            |                      | 14 1.5                    | 15.00     | 0           | 95.8              | 90        | 110           |      |          |      |
| Sample ID:          | MB-77241             | SampType: MI              | BLK       | Tes         | tCode: EF         | PA Method | 300.0: Anions |      |          |      |
| Client ID:          | PBS                  | Batch ID: 77              | 241       | F           | RunNo: <b>9</b> 9 | 9389      |               |      |          |      |
| Prep Date:          | 8/31/2023            | Analysis Date: <b>8</b> / | /31/2023  | S           | SeqNo: <b>36</b>  | 628254    | Units: mg/Kg  | 9    |          |      |
| Analyte             |                      | Result PQL                | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD | RPDLimit | Qual |
| Chloride            |                      | ND 1.5                    |           |             |                   |           |               |      |          |      |
| Sample ID:          | LCS-77241            | SampType: LC              | s         | Tes         | tCode: EF         | PA Method | 300.0: Anions |      |          |      |
| Client ID:          | LCSS                 | Batch ID: 77              | 241       | F           | RunNo: <b>9</b> 9 | 9389      |               |      |          |      |
| Prep Date:          | 8/31/2023            | Analysis Date: <b>8</b> / | /31/2023  | S           | SeqNo: <b>36</b>  | 628255    | Units: mg/Kg  | 9    |          |      |
| Analyte             |                      | Result PQL                | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD | RPDLimit | Qual |
| Chloride            |                      | 15 1.5                    | 15.00     | 0           | 97.1              | 90        | 110           |      |          |      |

**Qualifiers:** 

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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2308F19

11-Sep-23

| Client:<br>Project:   | Vertex Resource<br>Hackberry 18  | s Services  | , Inc.   |  |  |  |   |           |                      |      |
|---|--|---|--|--|--|--|---|-----------|----------------------|------|
| Sample ID: LCS-   | <b>77177</b> Sa  | трТуре: <b>LC</b>   | s  | Test   | tCode: EP  | PA Method  | 8015M/D: Dies   | el Range  | Organics             |      |
| Client ID: LCSS   | S B  | atch ID: 77   | 177  | R  | unNo: <b>99</b>  | 380  |   |           |                      |      |
| Prep Date: 8/29   | 9/2023 Analys  | sis Date: 8/  | /31/2023   | S  | eqNo: 36   | 627016   | Units: %Rec   |           |                      |      |
| Analyte   | Resu   | lt PQL  | SPK value  | SPK Ref Val                                    | %REC   | LowLimit   | HighLimit   | %RPD      | RPDLimit             | Qual |
| Surr: DNOP  | 5.   | 7   | 5.000  |  | 114  | 69   | 147   |           |                      |      |
| Sample ID: LCS-   | <b>77185</b> Sa  | mpType: <b>LC</b>   | s  | Test   | tCode: EP  | A Method   | 8015M/D: Dies   | el Range  | Organics             |      |
| Client ID: LCSS   | S B  | atch ID: 77   | 185  | R  | unNo: <b>9</b> 9   | 380  |   |           |                      |      |
| Prep Date: 8/30   | 0/2023 Analys  | sis Date: 8/  | /31/2023   | S  | eqNo: 36   | 627017   | Units: mg/Kg  | I         |                      |      |
| Analyte   | Resu   | lt PQL  | SPK value  | SPK Ref Val                                    | %REC   | LowLimit   | HighLimit   | %RPD      | RPDLimit             | Qual |
| Diesel Range Organics   | s (DRO) 6  | 1 10  | 50.00  | 0  | 121  | 61.9   | 130   |           |                      |      |
| Surr: DNOP  | 6.   | ô   | 5.000  |  | 131  | 69   | 147   |           |                      |      |
| Sample ID: MB-7   | 7177 Sa  | mpType: <b>M</b> I  | BLK  | Test   | tCode: EP  | A Method   | 8015M/D: Dies   | el Range  | Organics             |      |
| Client ID: PBS  | В  | atch ID: 77   | 177  | R  | unNo: <b>9</b> 9   | 380  |   |           |                      |      |
| Prep Date: 8/29   | 9/2023 Analys  | sis Date: 8/  | /31/2023   | S  | eqNo: 36   | 627018   | Units: %Rec   |           |                      |      |
| Analyte   | Resu   | lt PQL  | SPK value  | SPK Ref Val                                    | %REC   | LowLimit   | HighLimit   | %RPD      | RPDLimit             | Qual |
| Surr: DNOP  | 1:   | 2   | 10.00  |  | 116  | 69   | 147   |           |                      |      |
| Sample ID: MB-7   | 7 <b>7185</b> Sa   | mpType: <b>M</b> I  | BLK  | Test   | tCode: EP  | A Method   | 8015M/D: Dies   | el Range  | Organics             |      |
| Client ID: PBS  | В  | atch ID: 77   | 185  | R  | unNo: <b>9</b> 9   | 380  |   |           |                      |      |
| Prep Date: 8/30   | 0/2023 Analys  | sis Date: 8/  | /31/2023   | S  | eqNo: 36   | 627019   | Units: mg/Kg  | I         |                      |      |
| Analyte   | Resu   | lt PQL  | SPK value  | SPK Ref Val                                    | %REC   | LowLimit   | HighLimit   | %RPD      | RPDLimit             | Qual |
| Diesel Range Organics   | , ,  | D 10  |  |  |  |  |   |           |                      |      |
| Notor Oil Range Orgai   |  |   |  |  |  |  |   |           |                      |      |
|   |  |   | 10.00  |  | 106  | 60   | 4 4 7   |           |                      |      |
| Surr: DNOP  | nics (MRO) NI  |   | 10.00  |  | 126  | 69   | 147   |           |                      |      |
|   | 77175 Sa   | 3<br>mpType: <b>LC</b>  | s  |  | tCode: EP  | PA Method  | 147<br>8015M/D: Dies  | el Range  | Organics             |      |
| Surr: DNOP  | 77175 Sa   | 3   | s  |  |  | PA Method  |   | el Range  | Organics             |      |
| Surr: DNOP Sample ID: LCS- Client ID: LCSS  | 1:<br>-77175 Sai<br>S B  | 3<br>mpType: <b>LC</b>  | :S<br>175  | R  | tCode: EP  | PA Method 8<br>9380  |   | -         | Organics             |      |
| Surr: DNOP Sample ID: LCS- Client ID: LCSS  | 1:<br>.77175 Sa<br>S B   | 3<br>mpType: LC<br>atch ID: 77<br>sis Date: 8,<br>It PQL  | S<br>175<br>/31/2023   | R  | tCode: EP  | PA Method 8<br>9380  | 8015M/D: Dies   | -         | Organics<br>RPDLimit | Qual |
| Surr: DNOP<br>Sample ID: LCS-<br>Client ID: LCSS<br>Prep Date: 8/29<br>Analyte<br>Diesel Range Organics                             | 11<br>777175 Sau<br>5 B<br>D/2023 Analys<br>Resu<br>s (DRO) 4                            | 3<br>mpType: LC<br>latch ID: 77<br>sis Date: 8/<br>It PQL<br>3 10   | <b>25</b><br>175<br>/31/2023<br>SPK value<br>50.00                                     | R  | tCode: EP<br>tunNo: 99<br>teqNo: 36<br>%REC<br>87.0                      | PA Method 8<br>9380<br>627542<br>LowLimit<br>61.9                              | 8015M/D: Dies<br>Units: mg/Kg<br>HighLimit<br>130                         | J         | -                    | Qual |
| Surr: DNOP<br>Sample ID: LCS-<br>Client ID: LCSS<br>Prep Date: 8/29<br>Analyte  | 11<br>77175 Sau<br>5 B<br>0/2023 Analys<br>Resu  | 3<br>mpType: LC<br>latch ID: 77<br>sis Date: 8/<br>It PQL<br>3 10   | CS<br>175<br>/31/2023<br>SPK value   | R<br>S<br>SPK Ref Val                          | tCode: EP<br>tunNo: 99<br>seqNo: 36<br>%REC                              | PA Method 8<br>9380<br>627542<br>LowLimit                                      | 8015M/D: Dies<br>Units: mg/Kg<br>HighLimit                                | J         | -                    | Qual |
| Surr: DNOP<br>Sample ID: LCS-<br>Client ID: LCSS<br>Prep Date: 8/29<br>Analyte<br>Diesel Range Organics                             | 11<br>777175 Sau<br>5 B<br>D/2023 Analys<br>Resu<br>s (DRO) 4<br>4.                      | 3<br>mpType: LC<br>latch ID: 77<br>sis Date: 8/<br>It PQL<br>3 10   | <b>2S</b><br>175<br>/31/2023<br>SPK value<br>50.00<br>5.000                            | R<br>S<br>SPK Ref Val<br>0                     | tCode: EP<br>tunNo: 99<br>SeqNo: 36<br>%REC<br>87.0<br>93.3              | PA Method 3<br>9380<br>527542<br>LowLimit<br>61.9<br>69                        | 8015M/D: Dies<br>Units: mg/Kg<br>HighLimit<br>130                         | N<br>KRPD | RPDLimit             | Qual |
| Surr: DNOP<br>Sample ID: LCS-<br>Client ID: LCSS<br>Prep Date: 8/29<br>Analyte<br>Diesel Range Organics<br>Surr: DNOP               | 11<br>777175 Sau<br>5 B<br>9/2023 Analys<br>Resu<br>s (DRO) 4<br>4.<br>77176 Sau         | 3<br>mpType: LC<br>latch ID: 77<br>sis Date: 8/<br>lt PQL<br>3 10<br>7  | CS<br>175<br>/31/2023<br>SPK value<br>50.00<br>5.000                                   | R<br>SPK Ref Val<br>0<br>Test                  | tCode: EP<br>tunNo: 99<br>SeqNo: 36<br>%REC<br>87.0<br>93.3              | PA Method 3<br>9380<br>327542<br>LowLimit<br>61.9<br>69<br>PA Method 3         | 8015M/D: Dies<br>Units: mg/Kg<br>HighLimit<br>130<br>147                  | N<br>KRPD | RPDLimit             | Qual |
| Surr: DNOP Sample ID: LCS- Client ID: LCSS Prep Date: 8/29 Analyte Diesel Range Organics Surr: DNOP Sample ID: LCSS Client ID: LCSS | 11<br>777175 Sau<br>5 B<br>0/2023 Analys<br>Resu<br>s (DRO) 4<br>4.<br>777176 Sau<br>5 B | 3<br>mpType: LC<br>atch ID: 77<br>sis Date: <b>8</b> ,<br>lt PQL<br>3 10<br>7<br>mpType: LC                         | CS<br>175<br>/31/2023<br>SPK value<br>50.00<br>5.000<br>CS<br>176                      | R<br>S<br><u>SPK Ref Val</u><br>0<br>Test<br>R | tCode: EP<br>(unNo: 99<br>GeqNo: 36<br>%REC<br>87.0<br>93.3<br>tCode: EP | PA Method 3<br>9380<br>527542<br>LowLimit<br>61.9<br>69<br>PA Method 3<br>9380 | 8015M/D: Dies<br>Units: mg/Kg<br>HighLimit<br>130<br>147                  | N<br>KRPD | RPDLimit             | Qual |
| Surr: DNOP Sample ID: LCS- Client ID: LCSS Prep Date: 8/29 Analyte Diesel Range Organics Surr: DNOP Sample ID: LCSS Client ID: LCSS | 11<br>777175 Sau<br>5 B<br>0/2023 Analys<br>Resu<br>s (DRO) 4<br>4.<br>777176 Sau<br>5 B | 3<br>mpType: LC<br>atch ID: 77<br>bis Date: 8,<br>lt PQL<br>3 10<br>7<br>mpType: LC<br>satch ID: 77<br>bis Date: 8, | 2S<br>175<br>/31/2023<br>SPK value<br>50.00<br>5.000<br>5.000<br>2S<br>176<br>/31/2023 | R<br>S<br><u>SPK Ref Val</u><br>0<br>Test<br>R | tCode: EP<br>tunNo: 99<br>SeqNo: 36<br>%REC<br>87.0<br>93.3<br>tCode: EP | PA Method 3<br>9380<br>527542<br>LowLimit<br>61.9<br>69<br>PA Method 3<br>9380 | 8015M/D: Dies<br>Units: mg/Kg<br>HighLimit<br>130<br>147<br>8015M/D: Dies | N<br>KRPD | RPDLimit             | Qual |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2308F19

11-Sep-23

| Client:<br>Project:   | Vertex R<br>Hackberr                            | esources Se<br>y 18  | ervices   | , Inc.   |  |   |  |   |                  |                      |      |
|---|---|--|---|--|--|---|--|---|------------------|----------------------|------|
| Sample ID:  | LCS-77208                                       | SampT  | ype: LC   | S  | Tes  | tCode: Ef   | PA Method  | 8015M/D: Dies   | el Range         | Organics             |      |
| Client ID:  | LCSS  | Batch  | n ID: 77  | 208  | F  | RunNo: <b>9</b> 9   | 9380   |   |                  |                      |      |
| Prep Date:  | 8/30/2023                                       | Analysis D   | ate: <b>8/</b>  | 31/2023  | 5  | SeqNo: 3  | 627545   | Units: %Rec   |                  |                      |      |
| Analyte   |   | Result   | PQL   | SPK value  | SPK Ref Val  | %REC  | LowLimit   | HighLimit   | %RPD             | RPDLimit             | Qual |
| Surr: DNOP  |   | 5.9  |   | 5.000  |  | 119   | 69   | 147   |                  |                      |      |
| Sample ID:  | LCS-77213                                       | SampT  | ype: LC   | S  | Tes  | tCode: EF   | PA Method  | 8015M/D: Dies   | el Range         | Organics             |      |
| Client ID:  | LCSS  | Batch  | n ID: 77  | 213  | F  | RunNo: <b>9</b> 9   | 9380   |   |                  |                      |      |
| Prep Date:  | 8/30/2023                                       | Analysis D   | ate: 8/   | 31/2023  | S  | SeqNo: 3  | 627547   | Units: %Rec   |                  |                      |      |
| Analyte   |   | Result   | PQL   | SPK value  | SPK Ref Val  | %REC  | LowLimit   | HighLimit   | %RPD             | RPDLimit             | Qual |
| Surr: DNOP  |   | 5.3  |   | 5.000  |  | 105   | 69   | 147   |                  |                      |      |
| Sample ID:  | MB-77175  | SampT  | ype: ME   | BLK  | Tes  | tCode: EF   | PA Method  | 8015M/D: Dies   | el Range         | Organics             |      |
| Client ID:  | PBS   | Batch  | n ID: 77  | 175  | F  | RunNo: <b>9</b> 9   | 9380   |   |                  |                      |      |
| Prep Date:  | 8/29/2023                                       | Analysis D   | ate: 8/   | 31/2023  | S  | SeqNo: 3  | 627550   | Units: mg/Kg  | l                |                      |      |
| Analyte   |   | Result   | PQL   | SPK value  | SPK Ref Val  | %REC  | LowLimit   | HighLimit   | %RPD             | RPDLimit             | Qual |
| Diesel Range C  |   | ND   | 10<br>50  |  |  |   |  |   |                  |                      |      |
| Surr: DNOP  | e Organics (MRO)                                | ND<br>11   | 50  | 10.00  |  | 114   | 69   | 147   |                  |                      |      |
| Sample ID:  | MB-77176  | SampT  | ype: ME   | SI K   | Tes  | tCode: <b>F</b>   | PA Method  | 8015M/D: Dies   | el Range         | Organics             |      |
|   | PBS   | •  | n ID: 77  |  |  |   |  |   | ormango          | erganiee             |      |
| Prep Date:  |   |  |   |  | ч  | lunNo: <b>9</b>   | 9380   |   |                  |                      |      |
|   | 8/29/2023                                       | Analysis D   |   | -  |  | 8unNo: <b>9</b> 9<br>SeqNo: <b>3</b> 0  |  | Units: %Rec   |                  |                      |      |
| Analyte   | 8/29/2023                                       | Analysis D<br>Result   |   | 31/2023  |  |   |  |   | %RPD             | RPDLimit             | Qual |
| Analyte<br>Surr: DNOP   | 8/29/2023                                       | -  | )ate: <b>8/</b>   | 31/2023  | S  | SeqNo: 30   | 627552   | Units: <b>%Rec</b><br>HighLimit<br>147  | %RPD             | RPDLimit             | Qual |
| Surr: DNOP  |   | Result<br>13   | )ate: <b>8/</b>   | <b>31/2023</b><br>SPK value<br>10.00   | SPK Ref Val  | SeqNo: 3<br>%REC<br>126   | 627552<br>LowLimit<br>69   | HighLimit<br>147  |                  |                      | Qual |
|   |   | Result<br>13<br>SampT  | 0ate: <b>8/</b><br>PQL  | 31/2023<br>SPK value<br>10.00<br>BLK   | SPK Ref Val  | SeqNo: 3<br>%REC<br>126   | 627552<br>LowLimit<br>69<br>PA Method  | HighLimit   |                  |                      | Qual |
| Surr: DNOP  | MB-77208  | Result<br>13<br>SampT  | PQL<br>PQL<br>ype: <b>ME</b><br>DD: <b>77</b>                     | 31/2023<br>SPK value<br>10.00<br>BLK<br>208  | SPK Ref Val<br>Tes   | SeqNo: 36<br>%REC<br>126<br>tCode: EF   | 627552<br>LowLimit<br>69<br>PA Method 8  | HighLimit<br>147  |                  |                      | Qual |
| Surr: DNOP<br>Sample ID:<br>Client ID:  | MB-77208<br>PBS                                 | Result<br>13<br>SampT<br>Batch   | PQL<br>PQL<br>ype: <b>ME</b><br>DD: <b>77</b>                     | 31/2023<br>SPK value<br>10.00<br>3LK<br>208<br>31/2023                                     | SPK Ref Val<br>Tes   | SeqNo: 3<br><u>%REC</u><br>126<br>tCode: EF<br>RunNo: 99<br>SeqNo: 36                                   | 627552<br>LowLimit<br>69<br>PA Method<br>9380<br>627556                                      | HighLimit<br>147<br>8015M/D: Dies   |                  |                      | Qual |
| Surr: DNOP<br>Sample ID:<br>Client ID:<br>Prep Date:  | MB-77208<br>PBS                                 | Result<br>13<br>SampT<br>Batch<br>Analysis D                                   | PQL<br>PQL<br>ype: <b>ME</b><br>DD: <b>77</b><br>Date: <b>8</b> / | 31/2023<br>SPK value<br>10.00<br>3LK<br>208<br>31/2023                                     | SPK Ref Val<br>Tes<br>F<br>S                                       | SeqNo: 3<br><u>%REC</u><br>126<br>tCode: EF<br>RunNo: 99<br>SeqNo: 36                                   | 627552<br>LowLimit<br>69<br>PA Method<br>9380<br>627556                                      | HighLimit<br>147<br>8015M/D: Dies<br>Units: %Rec                                      | el Range         | Organics             |      |
| Surr: DNOP<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte   | MB-77208<br>PBS<br>8/30/2023                    | Result<br>13<br>SampT<br>Batch<br>Analysis D<br>Result<br>13                   | PQL<br>PQL<br>ype: <b>ME</b><br>DD: <b>77</b><br>Date: <b>8</b> / | 31/2023<br>SPK value<br>10.00<br>BLK<br>208<br>31/2023<br>SPK value<br>10.00               | SPK Ref Val<br>Tes<br>F<br>SPK Ref Val                             | SeqNo: 3<br>%REC<br>126<br>tCode: EF<br>RunNo: 99<br>SeqNo: 3<br>%REC<br>131                            | 627552<br>LowLimit<br>69<br>PA Method<br>9380<br>627556<br>LowLimit<br>69                    | HighLimit<br>147<br>8015M/D: Dies<br>Units: %Rec<br>HighLimit                         | el Range<br>%RPD | Organics<br>RPDLimit |      |
| Surr: DNOP<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Surr: DNOP<br>Sample ID:               | MB-77208<br>PBS<br>8/30/2023                    | Result<br>13<br>SampT<br>Batch<br>Analysis D<br>Result<br>13<br>SampT          | PQL<br>PQL<br>ype: ME<br>DD: 77<br>PQL<br>PQL                     | 31/2023<br>SPK value<br>10.00<br>3LK<br>208<br>31/2023<br>SPK value<br>10.00<br>3LK        | SPK Ref Val<br>Tes<br>F<br>SPK Ref Val<br>Tes                      | SeqNo: 3<br>%REC<br>126<br>tCode: EF<br>RunNo: 99<br>SeqNo: 3<br>%REC<br>131                            | 627552<br>LowLimit<br>69<br>PA Method<br>627556<br>LowLimit<br>69<br>PA Method               | HighLimit<br>147<br>8015M/D: Dies<br>Units: %Rec<br>HighLimit<br>147                  | el Range<br>%RPD | Organics<br>RPDLimit |      |
| Surr: DNOP<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Surr: DNOP<br>Sample ID:               | MB-77208<br>PBS<br>8/30/2023<br>MB-77213        | Result<br>13<br>SampT<br>Batch<br>Analysis D<br>Result<br>13<br>SampT          | Date:         8/           PQL                                    | 31/2023<br>SPK value<br>10.00<br>BLK<br>208<br>31/2023<br>SPK value<br>10.00<br>BLK<br>213 | SPK Ref Val<br>Tes<br>SPK Ref Val<br>SPK Ref Val<br>Tes            | SeqNo: 3<br>%REC<br>126<br>tCode: EF<br>RunNo: 99<br>SeqNo: 30<br>%REC<br>131<br>tCode: EF              | 627552<br>LowLimit<br>69<br>PA Method<br>69<br>627556<br>LowLimit<br>69<br>PA Method<br>9380 | HighLimit<br>147<br>8015M/D: Dies<br>Units: %Rec<br>HighLimit<br>147                  | el Range<br>%RPD | Organics<br>RPDLimit |      |
| Surr: DNOP<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Surr: DNOP<br>Sample ID:<br>Client ID: | MB-77208<br>PBS<br>8/30/2023<br>MB-77213<br>PBS | Result<br>13<br>SampT<br>Batch<br>Analysis D<br>Result<br>13<br>SampT<br>Batch | Date:         8/           PQL                                    | 31/2023<br>SPK value<br>10.00<br>BLK<br>208<br>31/2023<br>SPK value<br>10.00<br>BLK<br>213 | SPK Ref Val<br>Tes<br>SPK Ref Val<br>SPK Ref Val<br>Tes<br>Fi<br>S | SeqNo: 3<br>%REC<br>126<br>tCode: EF<br>RunNo: 99<br>SeqNo: 30<br>%REC<br>131<br>tCode: EF<br>RunNo: 99 | 627552<br>LowLimit<br>69<br>PA Method<br>69<br>627556<br>LowLimit<br>69<br>PA Method<br>9380 | HighLimit<br>147<br>8015M/D: Dies<br>Units: %Rec<br>HighLimit<br>147<br>8015M/D: Dies | el Range<br>%RPD | Organics<br>RPDLimit |      |

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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| Client:    | Vertex R         | esources Services, Inc.   |   |
|------------|------------------|---|---|
| Project:   | Hackberr         | y 18  |   |
| Sample ID: | lcs-77140        | SampType: LCS TestCode: EPA Method 8015D: Gasoline Range                    |   |
| Client ID: | LCSS             | Batch ID: 77140 RunNo: 99342  |   |
| Prep Date: | 8/28/2023        | Analysis Date: <b>8/30/2023</b> SeqNo: <b>3624717</b> Units: % <b>Rec</b>   |   |
| Analyte    |                  | Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual | ı |
| Surr: BFB  |                  | 1900 1000 192 15 244  |   |
| Sample ID: | mb-77140         | SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range                   |   |
| Client ID: | PBS              | Batch ID: 77140 RunNo: 99342  |   |
| Prep Date: | 8/28/2023        | Analysis Date: 8/30/2023 SeqNo: 3624718 Units: %Rec                         |   |
| Analyte    |                  | Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual | ı |
| Surr: BFB  |                  | 950 1000 94.7 15 244  |   |
| Sample ID: | lcs-77168        | SampType: LCS TestCode: EPA Method 8015D: Gasoline Range                    |   |
|            | LCSS             | Batch ID: 77168 RunNo: 99342  |   |
|            | 8/29/2023        | Analysis Date: 8/30/2023 SeqNo: 3625866 Units: mg/Kg                        |   |
| Analyte    |                  | Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual | ı |
|            | e Organics (GRO) | 22 5.0 25.00 0 88.6 70 130  |   |
| Surr: BFB  |                  | 1900 1000 195 15 244  |   |
| Sample ID: | mb-77168         | SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range                   |   |
| Client ID: | PBS              | Batch ID: 77168 RunNo: 99342  |   |
| Prep Date: | 8/29/2023        | Analysis Date: 8/30/2023 SeqNo: 3625867 Units: mg/Kg                        |   |
| Analyte    |                  | Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual | I |
| -          | e Organics (GRO) | ND 5.0  |   |
| Surr: BFB  |                  | 960 1000 96.0 15 244  |   |
| Sample ID: | lcs-77179        | SampType: LCS TestCode: EPA Method 8015D: Gasoline Range                    |   |
| Client ID: | LCSS             | Batch ID: 77179 RunNo: 99366  |   |
| Prep Date: | 8/29/2023        | Analysis Date: 8/31/2023 SeqNo: 3627634 Units: mg/Kg                        |   |
| Analyte    |                  | Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |   |
| -          | e Organics (GRO) | 23 5.0 25.00 0 93.6 70 130  |   |
| Surr: BFB  |                  | 2000 1000 203 15 244  |   |
| Sample ID: | lcs-77198        | SampType: LCS TestCode: EPA Method 8015D: Gasoline Range                    |   |
| Client ID: | LCSS             | Batch ID: 77198 RunNo: 99366  |   |
| Prep Date: | 8/30/2023        | Analysis Date: 9/1/2023 SeqNo: 3627635 Units: %Rec                          |   |
| Analyte    |                  | Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual | ł |
| Surr: BFB  |                  | 1900         1000         193         15         244                        |   |

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

2308F19

11-Sep-23

| Client:<br>Project:        | Vertex Re<br>Hackberr | esources S<br>y 18   | ervices,                 | Inc.      |                                       |                   |                    |                                 |           |          |      |
|----------------------------|-----------------------|----------------------|--------------------------|-----------|---------------------------------------|-------------------|--------------------|---------------------------------|-----------|----------|------|
| Sample ID:                 | mb-77198              | SampT                | уре: МЕ                  | BLK       | Tes                                   | tCode: EF         | PA Method          | 8015D: Gasol                    | ine Range |          |      |
| Client ID:                 | PBS                   | Batch                | n ID: <b>77</b> ′        | 198       | F                                     | RunNo: <b>9</b> 9 | 9366               |                                 |           |          |      |
| Prep Date:                 | 8/30/2023             | Analysis D           | 0ate: <b>9/</b>          | 1/2023    | 5                                     | SeqNo: 3          | 627636             | Units: %Rec                     | ;         |          |      |
| Analyte                    |                       | Result               | PQL                      | SPK value | SPK Ref Val                           | %REC              | LowLimit           | HighLimit                       | %RPD      | RPDLimit | Qual |
| Surr: BFB                  |                       | 940                  |                          | 1000      |                                       | 93.9              | 15                 | 244                             |           |          |      |
| Sample ID:                 | 2308f19-005ams        | SampT                | уре: МS                  | 6         | Tes                                   | tCode: EF         | PA Method          | 8015D: Gasol                    | ine Range |          |      |
| Client ID:                 | BH23-11 0'            | Batch                | n ID: <b>77</b> ′        | 179       | F                                     | RunNo: <b>9</b> 9 | 9366               |                                 |           |          |      |
| Prep Date:                 | 8/29/2023             | Analysis D           | Date: 8/                 | 31/2023   | S                                     | SeqNo: 3          | 627638             | Units: mg/K                     | g         |          |      |
| Analyte                    |                       | Result               | PQL                      | SPK value | SPK Ref Val                           | %REC              | LowLimit           | HighLimit                       | %RPD      | RPDLimit | Qual |
| Gasoline Rang              | ge Organics (GRO)     | 23                   | 4.8                      | 24.04     | 0                                     | 95.2              | 70                 | 130                             |           |          |      |
| Surr: BFB                  |                       | 1900                 |                          | 961.5     |                                       | 200               | 15                 | 244                             |           |          |      |
| Sample ID:                 | 2308f19-005amsd       | SampT                | уре: МЗ                  | SD.       | Tes                                   | tCode: El         | PA Method          | 8015D: Gasol                    | ine Range |          |      |
| Client ID:                 | BH23-11 0'            | Batch                | n ID: <b>77</b> ′        | 179       | F                                     | RunNo: <b>9</b> 9 | 9366               |                                 |           |          |      |
| Prep Date:                 | 8/29/2023             | Analysis D           | Date: <b>8/</b>          | 31/2023   | S                                     | SeqNo: 30         | 627639             | Units: mg/K                     | g         |          |      |
| Analyte                    |                       | Result               | PQL                      | SPK value | SPK Ref Val                           | %REC              | LowLimit           | HighLimit                       | %RPD      | RPDLimit | Qual |
| -                          | ge Organics (GRO)     | 23                   | 4.8                      | 24.13     | 0                                     | 93.8              | 70                 | 130                             | 1.10      | 20       |      |
| Surr: BFB                  |                       | 1900                 |                          | 965.3     |                                       | 200               | 15                 | 244                             | 0         | 0        |      |
| Sample ID:                 | mb-77179              | SampT                | ype: ME                  | BLK       | Tes                                   | tCode: El         | PA Method          | 8015D: Gasol                    | ine Range |          |      |
| Client ID:                 | PBS                   | Batch                | n ID: <b>77</b> ′        | 179       | F                                     | RunNo: <b>9</b> 9 | 9366               |                                 |           |          |      |
| Prep Date:                 | 8/29/2023             | Analysis D           | Date: 8/                 | 31/2023   | S                                     | SeqNo: 3          | 627706             | Units: mg/K                     | g         |          |      |
| Analyte                    |                       | Result               | PQL                      | SPK value | SPK Ref Val                           | %REC              | LowLimit           | HighLimit                       | %RPD      | RPDLimit | Qual |
| Gasoline Rang<br>Surr: BFB | ge Organics (GRO)     | ND<br>980            | 5.0                      | 1000      |                                       | 98.3              | 15                 | 244                             |           |          |      |
|                            |                       | 980                  |                          | 1000      |                                       | 90.3              | 15                 | 244                             |           |          |      |
|                            | lcs-77172             | •                    | ype: LC                  |           |                                       |                   |                    | 8015D: Gasol                    | ine Range |          |      |
| Client ID:                 | LCSS                  |                      | ו ID: <b>77</b> ′        |           | F                                     | RunNo: <b>9</b> 9 | 9411               |                                 |           |          |      |
| Prep Date:                 | 8/29/2023             | Analysis D           | Date: 9/                 | 2/2023    | ç                                     | SeqNo: 3          | 628857             | Units: %Rec                     | ;         |          |      |
| Analyte                    |                       | Result               | PQL                      |           | SPK Ref Val                           | %REC              | LowLimit           | HighLimit                       | %RPD      | RPDLimit | Qual |
| Surr: BFB                  |                       | 1900                 |                          | 1000      |                                       | 191               | 15                 | 244                             |           |          |      |
| Sample ID:                 | mb-77172              | SampT                | ype: ME                  | BLK       | Tes                                   | tCode: El         | PA Method          | 8015D: Gasol                    | ine Range |          |      |
| Client ID:                 | PBS                   | Batch                | n ID: <b>77</b> ′        | 172       | F                                     | RunNo: <b>9</b> 9 | 9411               |                                 |           |          |      |
| Offerit ID.                |                       |                      |                          |           |                                       |                   |                    |                                 |           |          |      |
| Prep Date:                 | 8/29/2023             | Analysis D           | Date: 9/                 | 2/2023    | e e e e e e e e e e e e e e e e e e e | SeqNo: 3          | 628859             | Units: %Rec                     | ;         |          |      |
|                            | 8/29/2023             | Analysis D<br>Result | 0ate: <b>9/</b> :<br>PQL |           | SPK Ref Val                           | SeqNo: 30<br>%REC | 628859<br>LowLimit | Units: <b>%Rec</b><br>HighLimit | %RPD      | RPDLimit | Qual |

#### Qualifiers:

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- D Sample Diluted Due to Matrix
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- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- P Sample pH Not In RL Reporting Limit

2308F19

11-Sep-23

|  | /ertex Resources  | Services,   | Inc.  |  |  |   |  |                                 |          |      |
|--|---|---|---|--|--|---|--|---------------------------------|----------|------|
| Project: H   | Hackberry 18  |   |   |  |  |   |  |                                 |          |      |
| Sample ID: LCS-7716  | 58 Sam  | pType: LC   | s   | Tes  | tCode: EF  | PA Method   | 8021B: Volati  | les                             |          |      |
| Client ID: LCSS  | Bat   | tch ID: 771   | 168   | F  | RunNo: <b>9</b> 9  | 9342  |  |                                 |          |      |
| Prep Date: 8/29/202  | 23 Analysis   | Date: 8/3   | 30/2023   | S  | SeqNo: 36  | 625922  | Units: mg/K  | g                               |          |      |
| Analyte  | Result  | PQL   | SPK value   | SPK Ref Val  | %REC   | LowLimit  | HighLimit  | %RPD                            | RPDLimit | Qual |
| Benzene  | 1.0   | 0.025   | 1.000   | 0  | 102  | 70  | 130  |                                 |          |      |
| Toluene  | 1.0   | 0.050   | 1.000   | 0  | 103  | 70  | 130  |                                 |          |      |
| Ethylbenzene   | 1.1   | 0.050   | 1.000   | 0  | 105  | 70  | 130  |                                 |          |      |
| (ylenes, Total   | 3.2   | 0.10  | 3.000   | 0  | 107  | 70  | 130  |                                 |          |      |
| Surr: 4-Bromofluorobenz  | ene 1.1   |   | 1.000   |  | 107  | 39.1  | 146  |                                 |          |      |
| Sample ID: mb-77168  | B Sam   | рТуре: <b>МВ</b>  | BLK   | Tes  | tCode: EF  | PA Method   | 8021B: Volati  | les                             |          |      |
| Client ID: PBS   | Bat   | tch ID: 771   | 168   | F  | RunNo: <b>9</b> 9  | 9342  |  |                                 |          |      |
| Prep Date: 8/29/202  | 23 Analysis   | Date: 8/3   | 30/2023   | Ş  | SeqNo: 36  | 625923  | Units: mg/K  | g                               |          |      |
| Analyte  | Result  | PQL   | SPK value   | SPK Ref Val  | %REC   | LowLimit  | HighLimit  | %RPD                            | RPDLimit | Qual |
| Benzene  | ND  | 0.025   |   |  |  |   |  |                                 |          |      |
| oluene   | ND  | 0.050   |   |  |  |   |  |                                 |          |      |
| thylbenzene  | ND  | 0.050   |   |  |  |   |  |                                 |          |      |
| (ylenes, Total   | ND  | 0.10  |   |  |  |   |  |                                 |          |      |
| Surr: 4-Bromofluorobenz  | ene 1.1   |   | 1.000   |  | 107  | 39.1  | 146  |                                 |          |      |
| Sample ID: LCS-7717  | 79 Sam  | pType: LC   | e   | Таа  | +Codo: EE  |   |  | laa                             |          |      |
|  | e eun   |   | 3   | Tes  |  | 'A Method   | 8021B: Volati  | les                             |          |      |
|  |   | tch ID: 771   |   |  | RunNo: <b>9</b> 9  |   | 8021B: Volati  | ies                             |          |      |
| Client ID: LCSS  | Bat   |   | 179   | F  |  | 9366  | Units: mg/K  |                                 |          |      |
| Client ID: LCSS<br>Prep Date: 8/29/202   | Bat   | tch ID: 771   | 179   | F  | RunNo: <b>9</b> 9  | 9366  |  |                                 | RPDLimit | Qual |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte  | Bat<br>23 Analysis  | tch ID: 771<br>Date: 8/3  | 179<br>31/2023  | F  | RunNo: <b>9</b> 9<br>SeqNo: <b>36</b>  | 9366<br>627739  | Units: <b>mg/K</b>   | g                               | RPDLimit | Qual |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>Benzene   | Bat<br>23 Analysis<br>Result  | tch ID: 771<br>Date: 8/3<br>PQL   | 1 <b>79</b><br>31/2023<br>SPK value   | F<br>SPK Ref Val   | RunNo: <b>99</b><br>SeqNo: <b>36</b><br>%REC   | 9366<br>527739<br>LowLimit  | Units: <b>mg/K</b><br>HighLimit  | g                               | RPDLimit | Qual |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>Jenzene<br>Joluene  | Bat<br>23 Analysis<br>Result<br>1.1   | tch ID: <b>771</b><br>Date: <b>8/</b><br>PQL<br>0.025   | 179<br>31/2023<br>SPK value<br>1.000  | F<br>SPK Ref Val<br>0  | RunNo: 99<br>SeqNo: 36<br>%REC<br>108  | <b>9366</b><br>527739<br>LowLimit<br>70   | Units: <b>mg/K</b><br>HighLimit<br>130   | g                               | RPDLimit | Qual |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>enzene<br>foluene<br>thylbenzene  | Bat<br>23 Analysis<br>Result<br>1.1<br>1.1  | tch ID: 771<br>Date: 8/3<br>PQL<br>0.025<br>0.050   | 31/2023<br>SPK value<br>1.000<br>1.000  | F<br>SPK Ref Val<br>0<br>0   | RunNo: 99<br>SeqNo: 36<br>%REC<br>108<br>108   | <b>9366</b><br><b>527739</b><br>LowLimit<br>70<br>70  | Units: <b>mg/K</b><br>HighLimit<br>130<br>130  | g                               | RPDLimit | Qual |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>Benzene<br>oluene<br>thylbenzene  | Bat<br>23 Analysis<br>Result<br>1.1<br>1.1<br>1.1<br>3.3  | tch ID: 771<br>Date: 8/3<br>PQL<br>0.025<br>0.050<br>0.050  | 31/2023<br>SPK value<br>1.000<br>1.000<br>1.000   | F<br>SPK Ref Val<br>0<br>0<br>0  | RunNo: 99<br>SeqNo: 36<br><u>%REC</u><br>108<br>108<br>111   | 2366<br>527739<br>LowLimit<br>70<br>70<br>70<br>70  | Units: <b>mg/K</b><br>HighLimit<br>130<br>130<br>130   | g                               | RPDLimit | Qual |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>Benzene<br>Foluene<br>Ethylbenzene<br>Kylenes, Total<br>Surr: 4-Bromofluorobenz   | Bat<br>23 Analysis<br>Result<br>1.1<br>1.1<br>1.1<br>3.3<br>ene 1.1   | tch ID: 771<br>Date: 8/3<br>PQL<br>0.025<br>0.050<br>0.050  | 179<br>31/2023<br>SPK value<br>1.000<br>1.000<br>1.000<br>3.000<br>1.000  | F<br>SPK Ref Val<br>0<br>0<br>0<br>0                                   | RunNo: 99<br>SeqNo: 36<br>%REC<br>108<br>108<br>111<br>112<br>110  | <b>2366</b><br><b>327739</b><br>LowLimit<br>70<br>70<br>70<br>70<br>39.1  | Units: <b>mg/K</b><br>HighLimit<br>130<br>130<br>130<br>130  | g<br>%RPD                       | RPDLimit | Qual |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>Benzene<br>Foluene<br>Ethylbenzene<br>Kylenes, Total  | Bat<br>23 Analysis<br>Result<br>1.1<br>1.1<br>1.1<br>3.3<br>ene 1.1<br>98 Sam   | tch ID: 771<br>Date: 8/3<br>PQL<br>0.025<br>0.050<br>0.050<br>0.10  | 31/2023<br>SPK value<br>1.000<br>1.000<br>1.000<br>3.000<br>1.000<br>S  | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>0<br>Tes                       | RunNo: 99<br>SeqNo: 36<br>%REC<br>108<br>108<br>111<br>112<br>110  | 2366<br>527739<br>LowLimit<br>70<br>70<br>70<br>70<br>70<br>39.1<br>24 Method   | Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>130<br>146   | g<br>%RPD                       | RPDLimit | Qual |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>Benzene<br>Foluene<br>Ethylbenzene<br>Kylenes, Total<br>Surr: 4-Bromofluorobenz<br>Sample ID: LCS-7715  | Bat<br>23 Analysis<br><u>Result</u><br>1.1<br>1.1<br>1.1<br>3.3<br>ene 1.1<br>98 Sam<br>Bat   | tch ID: 771<br>5 Date: 8/3<br>9 QL<br>0.025<br>0.050<br>0.050<br>0.10<br>0.10   | 179<br>31/2023<br>SPK value<br>1.000<br>1.000<br>3.000<br>1.000<br>S<br>198   | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>F                       | RunNo: 99<br>SeqNo: 36<br>%REC<br>108<br>108<br>111<br>112<br>110<br>tCode: EF   | 2366<br>527739<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1<br>24 Method<br>3366   | Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>130<br>146   | g<br>%RPD                       | RPDLimit | Qual |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>Benzene<br>Foluene<br>Ethylbenzene<br>Kylenes, Total<br>Surr: 4-Bromofluorobenz<br>Sample ID: LCS-7719<br>Client ID: LCSS   | Bat<br>23 Analysis<br><u>Result</u><br>1.1<br>1.1<br>1.1<br>3.3<br>ene 1.1<br>98 Sam<br>Bat   | tch ID: 771<br>Date: 8/3<br>PQL<br>0.025<br>0.050<br>0.10<br>pType: LC<br>tch ID: 771   | 179<br>31/2023<br>SPK value<br>1.000<br>1.000<br>3.000<br>1.000<br>S<br>198<br>1/2023   | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>F                       | RunNo: 99<br>SeqNo: 36<br>%REC<br>108<br>108<br>111<br>112<br>110<br>ttCode: EF<br>RunNo: 99   | 2366<br>527739<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1<br>24 Method<br>3366   | Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>130<br>146<br>8021B: Volati  | g<br>%RPD                       | RPDLimit | Qual |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>Benzene<br>Foluene<br>Ethylbenzene<br>Kylenes, Total<br>Surr: 4-Bromofluorobenz<br>Sample ID: LCS-7719<br>Client ID: LCSS<br>Prep Date: 8/30/202  | Bai<br>23 Analysis<br>Result<br>1.1<br>1.1<br>1.1<br>3.3<br>ene 1.1<br>98 Sam<br>Bai<br>23 Analysis<br>Result                             | tch ID: 771<br>Date: 8/3<br>PQL<br>0.025<br>0.050<br>0.050<br>0.10<br>pType: LC<br>tch ID: 771<br>Date: 9/7                                   | 179<br>31/2023<br>SPK value<br>1.000<br>1.000<br>3.000<br>1.000<br>S<br>198<br>1/2023   | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>0<br>Tes<br>F                  | RunNo: 99<br>SeqNo: 36<br>%REC<br>108<br>108<br>111<br>112<br>110<br>etCode: EF<br>RunNo: 99<br>SeqNo: 36  | 2366<br>527739<br>LowLimit<br>70<br>70<br>70<br>39.1<br>24 Method<br>2366<br>527740   | Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volati<br>Units: %Rec                                      | g<br>%RPD                       |          |      |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>Benzene<br>Foluene<br>Sthylbenzene<br>Kylenes, Total<br>Surr: 4-Bromofluorobenz<br>Client ID: LCS-7719<br>Client ID: LCSS<br>Prep Date: 8/30/202<br>Analyte<br>Surr: 4-Bromofluorobenz                                      | Bai<br>23 Analysis<br>Result<br>1.1<br>1.1<br>1.1<br>3.3<br>ene 1.1<br>98 Sam<br>Bai<br>23 Analysis<br>Result<br>ene 1.1                  | tch ID: 771<br>Date: 8/3<br>PQL<br>0.025<br>0.050<br>0.050<br>0.10<br>pType: LC<br>tch ID: 771<br>Date: 9/7                                   | 179<br>31/2023<br>SPK value<br>1.000<br>1.000<br>3.000<br>1.000<br>S<br>198<br>1/2023<br>SPK value<br>1.000   | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>F<br>SPK Ref Val        | RunNo: 99<br>SeqNo: 36<br>%REC<br>108<br>108<br>111<br>112<br>110<br>ttCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106   | 2366<br>227739<br>LowLimit<br>70<br>70<br>70<br>39.1<br>24 Method<br>2366<br>527740<br>LowLimit<br>39.1                     | Units: <b>mg/K</b><br>HighLimit<br>130<br>130<br>130<br>130<br>146<br><b>8021B: Volati</b><br>Units: <b>%Rec</b><br>HighLimit    | g<br>%RPD<br>les<br>%RPD        |          |      |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>Benzene<br>Foluene<br>Ethylbenzene<br>Kylenes, Total<br>Surr: 4-Bromofluorobenz<br>Sample ID: LCS-7719<br>Client ID: LCSS<br>Prep Date: 8/30/202<br>Analyte   | Bat<br>23 Analysis<br>Result<br>1.1<br>1.1<br>1.1<br>1.1<br>3.3<br>ene 1.1<br>28 Sam<br>Bat<br>23 Analysis<br>Result<br>ene 1.1<br>38 Sam | tch ID: 771<br>Date: 8/3<br>PQL<br>0.025<br>0.050<br>0.050<br>0.10<br>pType: LC:<br>tch ID: 771<br>Date: 9/2<br>PQL                           | 179<br>31/2023<br>SPK value<br>1.000<br>1.000<br>3.000<br>1.000<br>S<br>198<br>1/2023<br>SPK value<br>1.000   | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>SPK Ref Val             | RunNo: 99<br>SeqNo: 36<br>%REC<br>108<br>108<br>111<br>112<br>110<br>ttCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106   | 2366<br>527739<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1<br>24 Method<br>39.1<br>24 Method                                | Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volati<br>Units: %Rec<br>HighLimit<br>146                  | g<br>%RPD<br>les<br>%RPD        |          |      |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>Benzene<br>Foluene<br>Chylbenzene<br>Kylenes, Total<br>Surr: 4-Bromofluorobenz<br>Client ID: LCSS<br>Prep Date: 8/30/202<br>Analyte<br>Surr: 4-Bromofluorobenz<br>Sample ID: mb-77194                                       | Bai<br>23 Analysis<br>Result<br>1.1<br>1.1<br>1.1<br>3.3<br>ene 1.1<br>98 Sam<br>Bai<br>23 Analysis<br>Result<br>ene 1.1<br>8 Sam<br>Bai  | tch ID: 771<br>Date: 8/3<br>PQL<br>0.025<br>0.050<br>0.050<br>0.10<br>pType: LC<br>tch ID: 771<br>pOte: 9/2<br>PQL                            | 179<br>31/2023<br>SPK value<br>1.000<br>1.000<br>3.000<br>1.000<br>S<br>198<br>1/2023<br>SPK value<br>1.000<br>SLK<br>198                                   | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>SPK Ref Val<br>Tes<br>F | RunNo: 99<br>SeqNo: 36<br>%REC<br>108<br>108<br>111<br>112<br>110<br>etCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>106   | 2366<br>527739<br>LowLimit<br>70<br>70<br>70<br>39.1<br>24 Method<br>366<br>527740<br>LowLimit<br>39.1<br>24 Method<br>39.6 | Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volati<br>Units: %Rec<br>HighLimit<br>146                  | g<br>%RPD<br>les<br>%RPD<br>les |          |      |
| Client ID: LCSS<br>Prep Date: 8/29/202<br>Analyte<br>enzene<br>oluene<br>thylbenzene<br>ylenes, Total<br>Surr: 4-Bromofluorobenz<br>Client ID: LCS-7719<br>Client ID: LCSS<br>Prep Date: 8/30/202<br>Analyte<br>Surr: 4-Bromofluorobenz<br>Sample ID: mb-77194<br>Client ID: PBS | Bai<br>23 Analysis<br>Result<br>1.1<br>1.1<br>1.1<br>3.3<br>ene 1.1<br>98 Sam<br>Bai<br>23 Analysis<br>Result<br>ene 1.1<br>8 Sam<br>Bai  | tch ID: 771<br>Date: 8/3<br>PQL<br>0.025<br>0.050<br>0.050<br>0.10<br>pType: LC<br>tch ID: 771<br>Date: 9/<br>PQL<br>pType: MB<br>tch ID: 771 | 179<br>31/2023<br>SPK value<br>1.000<br>1.000<br>3.000<br>1.000<br>S<br>1/2023<br>SPK value<br>1.000<br>3.000<br>1.000<br>S<br>1/2023<br>SPK value<br>1.000 | F<br>SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>SPK Ref Val<br>Tes<br>F | RunNo: 99<br>SeqNo: 36<br>%REC<br>108<br>108<br>111<br>112<br>110<br>ttCode: EF<br>RunNo: 99<br>SeqNo: 36<br>KREC<br>106<br>ttCode: EF<br>RunNo: 99<br>SeqNo: 36 | 2366<br>527739<br>LowLimit<br>70<br>70<br>70<br>39.1<br>24 Method<br>366<br>527740<br>LowLimit<br>39.1<br>24 Method<br>39.6 | Units: mg/K<br>HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volati<br>Units: %Rec<br>HighLimit<br>146<br>8021B: Volati | g<br>%RPD<br>les<br>%RPD<br>les |          |      |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#: **2308F19** 

11-Sep-23

| Client:<br>Project:                 | Vertex Re<br>Hackberry |            | ervices,          | Inc.      |             |                  |           |                |      |          |      |
|-------------------------------------|------------------------|------------|-------------------|-----------|-------------|------------------|-----------|----------------|------|----------|------|
| -                                   |                        |            |                   |           |             |                  |           |                |      |          |      |
| Sample ID: mb                       | o-77198                | SampT      | ype: MB           | LK        | Tes         | tCode: EP        | 'A Method | 8021B: Volatil | es   |          |      |
| Client ID: PB                       | S                      | Batch      | n ID: 771         | 98        | F           | RunNo: <b>99</b> | )366      |                |      |          |      |
| Prep Date: 8/                       | /30/2023               | Analysis D | )ate: <b>9/</b> * | 1/2023    | S           | SeqNo: 36        | 527741    | Units: %Rec    |      |          |      |
| Analyte                             |                        | Result     | PQL               | SPK value | SPK Ref Val | %REC             | LowLimit  | HighLimit      | %RPD | RPDLimit | Qual |
| Surr: 4-Bromoflue                   | orobenzene             | 1.1        |                   | 1.000     |             | 106              | 39.1      | 146            |      |          |      |
| Sample ID: mb                       | o-77179                | SampT      | уре: МВ           | LK        | Tes         | tCode: EF        | 'A Method | 8021B: Volatil | es   |          |      |
| Client ID: PB                       | S                      | Batch      | n ID: 771         | 79        | F           | RunNo: <b>99</b> | 366       |                |      |          |      |
| Prep Date: 8/                       | /29/2023               | Analysis D | ate: <b>8/</b> 3  | 31/2023   | S           | SeqNo: <b>36</b> | 27742     | Units: mg/Kg   | g    |          |      |
| Analyte                             |                        | Result     | PQL               | SPK value | SPK Ref Val | %REC             | LowLimit  | HighLimit      | %RPD | RPDLimit | Qual |
| Benzene                             |                        | ND         | 0.025             |           |             |                  |           |                |      |          |      |
| Toluene                             |                        | ND         | 0.050             |           |             |                  |           |                |      |          |      |
| Ethylbenzene                        |                        | ND         | 0.050             |           |             |                  |           |                |      |          |      |
| Xylenes, Total<br>Surr: 4-Bromoflue | orobenzeno             | ND<br>1.1  | 0.10              | 1.000     |             | 107              | 39.1      | 146            |      |          |      |
|                                     | loiobelizerie          | 1.1        |                   | 1.000     |             | 107              | 39.1      | 140            |      |          |      |
| Sample ID: 230                      | 08f19-006ams           | SampT      | ype: <b>MS</b>    | ;         | Tes         | tCode: EP        | A Method  | 8021B: Volatil | les  |          |      |
| Client ID: BH                       | 123-11 2'              | Batch      | n ID: 771         | 79        | F           | RunNo: <b>99</b> | )366      |                |      |          |      |
| Prep Date: 8/                       | /29/2023               | Analysis D | ate: 8/3          | 31/2023   | S           | SeqNo: <b>36</b> | 27828     | Units: mg/Kg   | g    |          |      |
| Analyte                             |                        | Result     | PQL               | SPK value | SPK Ref Val | %REC             | LowLimit  | HighLimit      | %RPD | RPDLimit | Qual |
| Benzene                             |                        | 1.1        | 0.025             | 0.9833    | 0           | 108              | 70        | 130            |      |          |      |
| Toluene                             |                        | 1.1        | 0.049             | 0.9833    | 0           | 109              | 70        | 130            |      |          |      |
| Ethylbenzene                        |                        | 1.1        | 0.049             | 0.9833    | 0           | 110              | 70        | 130            |      |          |      |
| Xylenes, Total                      |                        | 3.3        | 0.098             | 2.950     | 0           | 112              | 70        | 130            |      |          |      |
| Surr: 4-Bromoflue                   | orobenzene             | 1.0        |                   | 0.9833    |             | 105              | 39.1      | 146            |      |          |      |
| Sample ID: 230                      | 08f19-006amsd          | SampT      | ype: MS           | D         | Tes         | tCode: EF        | A Method  | 8021B: Volatil | es   |          |      |
| Client ID: BH                       | 123-11 2'              | Batch      | n ID: 771         | 79        | F           | RunNo: <b>99</b> | 366       |                |      |          |      |
| Prep Date: 8/                       | /29/2023               | Analysis D | ate: 8/3          | 31/2023   | 5           | SeqNo: <b>36</b> | 27829     | Units: mg/K    | g    |          |      |
| Analyte                             |                        | Result     | PQL               | SPK value | SPK Ref Val | %REC             | LowLimit  | HighLimit      | %RPD | RPDLimit | Qual |
| Benzene                             |                        | 1.1        | 0.025             | 0.9843    | 0           | 112              | 70        | 130            | 3.45 | 20       |      |
| Toluene                             |                        | 1.1        | 0.049             | 0.9843    | 0           | 112              | 70        | 130            | 3.04 | 20       |      |
| Ethylbenzene                        |                        | 1.1        | 0.049             | 0.9843    | 0           | 114              | 70        | 130            | 3.30 | 20       |      |
| Xylenes, Total                      |                        | 3.4        | 0.098             | 2.953     | 0           | 116              | 70        | 130            | 3.72 | 20       |      |
| Surr: 4-Bromoflue                   | orobenzene             | 1.0        |                   | 0.9843    |             | 104              | 39.1      | 146            | 0    | 0        |      |
| Sample ID: LC                       | S-77172                | SampT      | ype: LC           | S         | Tes         | tCode: EF        | 'A Method | 8021B: Volatil | es   |          |      |
| Client ID: LC                       | ss                     | Batch      | n ID: 771         | 72        | F           | RunNo: <b>99</b> | 9411      |                |      |          |      |
| Prep Date: 8/                       | /29/2023               | Analysis D | )ate: 9/2         | 2/2023    | 5           | SeqNo: <b>36</b> | 528971    | Units: %Rec    |      |          |      |
| 1 10p Date. 0                       |                        |            |                   |           |             |                  |           |                |      |          |      |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2308F19

11-Sep-23

|                            | ex Resources Servic<br>kberry 18 | es, Inc.    |             |                 |          |                |      |          |      |
|----------------------------|----------------------------------|-------------|-------------|-----------------|----------|----------------|------|----------|------|
| Sample ID: LCS-77172       | SampType:                        | LCS         | Test        | Code: EP        | A Method | 8021B: Volatil | es   |          |      |
| Client ID: LCSS            | Batch ID:                        | 77172       | R           | unNo: <b>99</b> | 411      |                |      |          |      |
| Prep Date: 8/29/2023       | Analysis Date:                   | 9/2/2023    | S           | eqNo: 36        | 28971    | Units: %Rec    |      |          |      |
| Analyte                    | Result PQ                        | L SPK value | SPK Ref Val | %REC            | LowLimit | HighLimit      | %RPD | RPDLimit | Qual |
| Surr: 4-Bromofluorobenzene | 1.1                              | 1.000       |             | 108             | 39.1     | 146            |      |          |      |
| Sample ID: mb-77172        | SampType:                        | MBLK        | Test        | Code: EP        | A Method | 8021B: Volatil | es   |          |      |
| Client ID: PBS             | Batch ID:                        | 77172       | R           | unNo: <b>99</b> | 411      |                |      |          |      |
| Prep Date: 8/29/2023       | Analysis Date:                   | 9/2/2023    | S           | eqNo: 36        | 28973    | Units: %Rec    |      |          |      |
| Analyte                    | Result PQ                        | L SPK value | SPK Ref Val | %REC            | LowLimit | HighLimit      | %RPD | RPDLimit | Qual |
| Surr: 4-Bromofluorobenzene | 1.0                              | 1.000       |             | 105             | 39.1     | 146            |      |          |      |

Qualifiers:

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- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
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- P Sample pH Not In Range
- RL Reporting Limit

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WO#: 2308F19 11-Sep-23

| HALL<br>ENVIRONMENTAL<br>ANALYSIS<br>LABORATORY                   | L<br>TEL: 505-345                              | nental Analysis Laborator<br>4901 Hawkins N<br>Albuquerque. NM 8716<br>5-3975 FAX: 505-345-416<br>ww.hallenvironmental.co. | 79<br>99 <b>Sam</b><br>97 | ple Log-In (                      | Check List           |
|---|--|--|---------------------------|-----------------------------------|----------------------|
| Client Name: Vertex Resou<br>Services, Inc                        |  | mber: 2308F19  |                           | RcptNo                            | : 1                  |
| Received By: Tracy Casa   | rrubias 8/29/2023 7:55:0                       | 0 AM   |                           |                                   |                      |
| Completed By: Tracy Casa  | rrubias 8/29/2023 8:29:1                       | 2 AM   |                           |                                   |                      |
| Reviewed By: H 8-2  | 9-23   |  |                           |                                   |                      |
| Chain of Custody  |  |  |                           |                                   |                      |
| 1. Is Chain of Custody comple                                     | te?  | Yes  | No 🔽                      | Not Present                       |                      |
| 2. How was the sample deliver                                     | red?   | Courier  |                           |                                   |                      |
| Log In<br>3. Was an attempt made to co                            | ol the samples?                                | Yes 🔽  | No 🗌                      | NA 🗌                              |                      |
| 4. Were all samples received a                                    | at a temperature of >0° C to 6.0°C             | Yes 🔽  | No 🗌                      | na 🗆                              |                      |
| 5. Sample(s) in proper contain                                    | er(s)?   | Yes 🔽  | No 🗌                      |                                   |                      |
| 6. Sufficient sample volume for                                   | r indicated test(s)?                           | Yes 🔽  | No 🗌                      |                                   |                      |
| 7. Are samples (except VOA a                                      | nd ONG) properly preserved?                    | Yes 🗹  | No 🗌                      | _                                 |                      |
| 8. Was preservative added to b                                    | pottles?                                       | Yes  | No 🗹                      | NA 🗌                              |                      |
| 9. Received at least 1 vial with                                  | headspace <1/4" for AQ VOA?                    | Yes  | No 🗌                      | NA 🗹                              |                      |
| 10. Were any sample container                                     | s received broken?                             | Yes  | No 🗹                      | # of preserved<br>bottles checked |                      |
| 11. Does paperwork match bottl<br>(Note discrepancies on chai     |  | Yes 🗹  | No 🗌                      | for pH:                           | or >12 unless noted) |
| 12. Are matrices correctly identi                                 | fied on Chain of Custody?                      | Yes 🔽  | No 🗌                      | Adjusted?                         |                      |
| 13. Is it clear what analyses wer                                 | e requested?                                   | Yes 🖌  | No 🗌                      |                                   | 7~8/29/23            |
| 14. Were all holding times able<br>(If no, notify customer for au |  | Yes 🗹  | No 🗌                      | Enecked by:                       | mojeges              |
| Special Handling (if appl   | licable)                                       |  |                           |                                   |                      |
| 15. Was client notified of all dis                                |  | Yes  | No 🗌                      | NA 🗹                              |                      |
| Person Notified:  | Da   | ate:   |                           |                                   |                      |
| By Whom:  | Via  | a: eMail Pho   | one 🗌 Fax                 | In Person                         |                      |
| Regarding:  |  |  |                           |                                   |                      |
|   | Mailing address.phone number and I             | Email/Fax are missing o  | on COC- TM                | C 8/29/23                         |                      |
| 16. Additional remarks:   |  |  |                           |                                   |                      |
| Client did not relinquis  | sh chain of custody                            |  |                           |                                   |                      |
| 17. <u>Cooler Information</u>                                     |  |  |                           |                                   |                      |
| Cooler No Temp °C<br>1 5.6  | Condition Seal Intact Seal No<br>Good Yes Yogi | o Seal Date S  | igned By                  |                                   |                      |
| . 0.0   |  |  |                           |                                   |                      |

Received by OCD: 11/1/2023 1:09:31 PM

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Received by OCD: 11/1/2023 1:09:31 PM

Turn-Around Time: Chain-of-Custody Record 3 Day HALL ENVIRONMENTAL Client: Vertex CDEVON Standard Rush 3 DAY ANALYSIS LABORATORY Project Name: www.hallenvironmental.com Hackberry 18 Mailing Address: onfile 4901 Hawkins NE - Albuquerque, NM 87109 Project #: Tel. 505-345-3975 Fax 505-345-4107 23E-03903 **Analysis Request** Phone #: SO4 7PH)\$015D(GR0 / DR0 / MR0) Total Coliform (Present/Absent) Project Manager: email or Fax#: TMB's (8021) 8081 Pesticides/8082 PCB's PAHs by 8310 or 8270SIMS NO<sub>2</sub>, PO<sub>4</sub>, Kent Stallings QA/QC Package: □ Level 4 (Full Validation) □ Standard EDB (Method 504.1) Sampler: Zach Englander Accreditation: □ Az Compliance 8270 (Semi-VOA) Yes J I No Br, NO<sub>3</sub>, On Ice: □ Other 4091 BTEX MTBE / □ NELAC **RCRA 8 Metals** # of Coolers: □ EDD (Type) 8260 (VOA) (°C) Cooler Temp(including CF): 5.7-0.1=5.6 ц, HEAL No. Preservative Container බ් 2308F19 Sample Name Type and # Type Date Time Matrix 9:00 BH23-01 0 501 TP 8-19-23 100 19r RH23-09 002 9:15 0 1-123-10 003 30 2 9 BH23-11 45 004 0 10 00 12H23-005 2 15 000 10 0 0 30 RH23-12 007 2 12 45 RH23 000 3. 5 00 12 009 4 12 15 RH23-010 BH23-13 0 110 30 V 2 13 1423-13 612 45 Remarks: Direct Bill to Devon CC: Kstallings @ vertex.cg aharris Quertex.cg Date Time Received by: Via: Relinguished by: Time: Date: 8/28/23 845 CIALL Date Time Relinguished by: Received by: Via: Courr 8/29/23 7:55 Time: Date: 1<sup>8</sup>h8h3 900 ammys

of :

Received by OCD: 11/1/2023 1:09:31 PM

| C                  | Chain     | -of-C                                 | ustody Reco        | rd            | Turn-Around          | d Time:  | States.                            |                | 7                  |                            |                      | -                  |                          |                      |                |            |                 |                                 |              |        |          |              |
|--------------------|-----------|---------------------------------------|--------------------|---------------|----------------------|--|------------------------------------|----------------|--------------------|----------------------------|----------------------|--------------------|--------------------------|----------------------|----------------|------------|-----------------|---------------------------------|--------------|--------|----------|--------------|
| Client:            |           |                                       | (Devon)            |               | Standard             | d 🛛 Rusi   | h 3 DA                             | 17             |                    |                            | R                    |                    |                          |                      |                |            |                 |                                 |              |        |          |              |
|                    |           |                                       |                    |               | Project Nam          | e:   |                                    |                |                    |                            |                      |                    |                          |                      |                |            |                 |                                 |              | KA     | 10       | RI           |
| Mailing            | Addres    | s:                                    | on file            | 5             | Hackl                | erry 19  |                                    |                |                    |                            |                      |                    |                          |                      |                |            |                 | ntal.c                          |              |        |          |              |
|                    |           | (                                     | DA THE             |               | Project #:           | erry is  |                                    |                | -                  | 49                         | 01 H                 | lawk               | ins l                    | NE -                 | Alt            | buqu       | erqu            | ue, N                           | IM 87        | 109    |          |              |
|                    |           | · · · · · · · · · · · · · · · · · · · |                    |               |                      | 02002  |                                    |                |                    | Te                         | el. 50               | )5-34              | 45-3                     |                      |                |            |                 | _                               | -4107        | 7      | -0       | Martin Color |
| Phone              |           |                                       |                    |               |                      | 03903  |                                    |                |                    |                            |                      |                    |                          | A                    |                | /sis       | Req             | ques                            | t            |        |          |              |
| 10                 | or Fax#:  |                                       | V                  |               | Project Mana         | ager:  |                                    |                | 5                  | Ô                          |                      |                    |                          |                      | SO4            |            |                 | ent)                            |              |        |          |              |
|                    | Package   |                                       |                    | 1 <i>11</i> X | Ken                  | t Stall  | Line                               |                | 80                 | WI                         | PCB's                |                    | IMS                      |                      | PO4,           |            |                 | Abs                             |              |        |          |              |
| □ Star             |           |                                       | Level 4 (Full Vali | dation)       |                      |  |                                    |                | TMB's (8021)       | RO                         | 2<br>5               |                    | 70S                      |                      | 2, P           |            | ľ               | ent/                            |              |        | 1.5      |              |
|                    | litation: | □ Az Co<br>□ Othe                     | ompliance<br>r     |               | Sampler: 2           | Or Yes   | No No                              |                |                    |                            | 808                  | 4.1                | r 82                     |                      | $NO_{2}$ ,     |            | 2               | res                             |              |        |          |              |
| P                  | D (Type)  |                                       | I                  |               | # of Coolers:        |  |                                    | 4091           | Щ.                 | SRO                        | des/                 | 9.50               | 0 0                      | als                  | ဝိ             |            | Q               | n (P                            |              |        |          |              |
| <u> </u>           |           |                                       | 1                  |               |                      | (including CF): 5  | +-01=                              | 5.6 (°C)       | ΞΨ.                | 5D((                       | stici                | tho                | 83                       | Met                  | Ž              | (Y         | m-              | iforr                           |              |        |          |              |
|                    |           |                                       |                    |               |                      | 1.1  |                                    |                | K                  | 801                        | Ъ                    | Ne Ne              | s by                     | A 8                  | ä              | ž          | (Se             | Col                             |              |        | 2        |              |
| Date               | Time      | Matrix                                | Sample Name        |               | Container Type and # | Preservative<br>Type   | THE REPORT OF THE OWNER AND A DECK | L No.          | <b>BTEX/MTBE /</b> | 4PB:8015D(GRO / DRO / MRO) | 8081 Pesticides/8082 | EDB (Method 504.1) | PAHs by 8310 or 8270SIMS | <b>RCRA 8 Metals</b> | CIJF, Br, NO3, | 8260 (VOA) | 8270 (Semi-VOA) | Total Coliform (Present/Absent) |              |        |          |              |
|                    | 13:00     |                                       | BH23 - 13          | 4-            | 1 1                  | 1  | 23081                              |                | H                  | ¥                          |                      | <u> </u>           | -                        |                      | <u>-</u>       |            | - 00            |                                 |              |        |          | +            |
|                    |           | 5011                                  |                    | · · · ·       | l yar                | 169  | 013                                |                | $\vdash$           | $\square$                  |                      |                    | _                        |                      |                |            |                 |                                 |              |        |          |              |
| $\left  - \right $ | 13:15     |                                       | BH23-14            | 0             | - +                  |  | 014                                |                | $\square$          |                            |                      |                    |                          |                      |                | _          |                 |                                 | to Charles a | 100 (g | 1994     |              |
| N/                 | 13:30     | V                                     | BH23-14            | 2             | V                    |  | 015                                |                | V                  | V                          |                      |                    |                          |                      | V              |            |                 |                                 |              |        | 125      |              |
|                    | . 6       |                                       |                    |               |                      |  | 2.54                               | and the second |                    |                            |                      |                    | 2.5                      |                      | 125            | ÷.,        |                 | 1.5                             |              |        |          |              |
|                    |           |                                       |                    |               |                      | 1 R <sup>1</sup> e   |                                    |                |                    |                            |                      |                    | 223                      | 1                    |                |            |                 |                                 |              |        |          |              |
|                    |           |                                       |                    |               |                      | ter all'hour   | a con su                           | , 1 K          |                    |                            |                      |                    |                          |                      |                |            |                 |                                 |              |        |          |              |
|                    |           |                                       |                    |               |                      |  | ~                                  |                |                    |                            |                      |                    |                          |                      |                |            |                 |                                 |              |        |          |              |
|                    |           |                                       |                    |               |                      | the street of  |                                    |                |                    | _                          | -+                   | -                  |                          | -+                   | -              |            |                 |                                 |              |        |          |              |
|                    |           |                                       |                    |               |                      |  |                                    |                |                    |                            | $\rightarrow$        | -                  | -                        | -                    |                |            | -               |                                 |              | +      | -        |              |
|                    |           |                                       |                    |               |                      |  |                                    |                |                    |                            |                      | _                  |                          |                      | _              |            |                 |                                 | -            |        | 21.56    |              |
|                    |           |                                       |                    |               |                      | and the second |                                    |                |                    |                            |                      |                    | _                        | _                    |                |            | _               |                                 |              |        | <u> </u> |              |
|                    |           |                                       |                    |               |                      |  |                                    | h bernor in    |                    |                            |                      |                    | _                        |                      |                |            | 1               | 100                             |              |        |          |              |
| Dete:              | Time      | Delinguish                            | ad huu             |               | D                    |  | The Patricks lase                  | biistier s     |                    |                            |                      |                    |                          |                      | -              |            |                 |                                 |              |        |          |              |
| Date:              | Time:     | Relinquish                            | eu by:             |               | Received by:         | Via:   | Date                               |                | Rem                | harks                      | 1                    | irec               | f                        | Bil                  | l              | 10         | P               | )-evi                           | on           |        |          |              |
| Date               | Time:     | Relinquish                            | ed by:             |               | Canuel Bacalyad bur  |  | B/28/23<br>Date                    | 845            |                    |                            | Ż                    | 2                  | : k                      | SI                   | 41             | lins       | Se              | lve                             | rten<br>x, c | к, с   | 3        |              |
| Date:<br>V1012     |           |                                       |                    |               | Received by:         | Viaccum  |                                    | Time           |                    |                            |                      |                    | a                        | har                  | ~is            | 0          | ve              | rtez                            | x c          | 9      | ·        |              |
| Calm               | 1902      | UM                                    | Mun)               |               | K-                   | 7/   | 8/29                               | T.J            |                    |                            |                      |                    | -(                       |                      |                |            |                 |                                 |              | `      |          |              |

Released to Imaging: 3/5/2024 11:07:34 AM



September 11, 2023

Kent Stallings Vertex Resources Services, Inc. 3101 Boyd Drive Carlsbad, NM 88220 TEL: FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

OrderNo.: 2308F20

RE: Hackberry 18 Fed 2

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 16 sample(s) on 8/29/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-15 0' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 9:00:00 AM Lab ID: 2308F20-001 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 1:32:00 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/31/2023 1:32:00 PM Surr: DNOP 123 69-147 %Rec 1 8/31/2023 1:32:00 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 11:42:17 AM 5.0 mg/Kg 1 Surr: BFB 92.2 15-244 %Rec 1 9/1/2023 11:42:17 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 11:42:17 AM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 9/1/2023 11:42:17 AM Ethylbenzene ND 0.050 mg/Kg 1 9/1/2023 11:42:17 AM Xylenes, Total ND mg/Kg 9/1/2023 11:42:17 AM 0.099 1 Surr: 4-Bromofluorobenzene 105 39.1-146 %Rec 1 9/1/2023 11:42:17 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 10:50:53 PM

84

60

20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 1 of 22

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-15 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 9:15:00 AM Lab ID: 2308F20-002 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH Diesel Range Organics (DRO) ND 9.6 mg/Kg 1 8/31/2023 1:55:55 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/31/2023 1:55:55 PM Surr: DNOP 126 69-147 %Rec 1 8/31/2023 1:55:55 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 12:05:44 PM 4.9 mg/Kg 1 Surr: BFB 92.1 15-244 %Rec 1 9/1/2023 12:05:44 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 12:05:44 PM 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 9/1/2023 12:05:44 PM Ethylbenzene ND 0.049 mg/Kg 1 9/1/2023 12:05:44 PM Xylenes, Total ND 0.097 mg/Kg 1 9/1/2023 12:05:44 PM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 9/1/2023 12:05:44 PM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 11:03:18 PM 860 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 22

Project:

**CLIENT:** Vertex Resources Services, Inc.

Hackberry 18 Fed 2

**Analytical Report** Lab Order 2308F20

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-16 0' Collection Date: 8/20/2023 9:30:00 AM Received Date: 8/29/2023 7:55:00 AM

| Lab ID: 2308F20-003              | Matrix: SOIL | Rece     | eived Date: | 8/29/2 | 2023 7:55:00 AM       |
|----------------------------------|--------------|----------|-------------|--------|-----------------------|
| Analyses                         | Result       | RL Qu    | al Units    | DF     | Date Analyzed         |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANICS     |          |             |        | Analyst: DGH          |
| Diesel Range Organics (DRO)      | 100          | 9.9      | mg/Kg       | 1      | 8/31/2023 2:19:49 PM  |
| Motor Oil Range Organics (MRO)   | 140          | 50       | mg/Kg       | 1      | 8/31/2023 2:19:49 PM  |
| Surr: DNOP                       | 84.1         | 69-147   | %Rec        | 1      | 8/31/2023 2:19:49 PM  |
| EPA METHOD 8015D: GASOLINE RANG  | E            |          |             |        | Analyst: JJP          |
| Gasoline Range Organics (GRO)    | ND           | 4.8      | mg/Kg       | 1      | 9/1/2023 1:19:12 AM   |
| Surr: BFB                        | 89.6         | 15-244   | %Rec        | 1      | 9/1/2023 1:19:12 AM   |
| EPA METHOD 8021B: VOLATILES      |              |          |             |        | Analyst: JJP          |
| Benzene                          | ND           | 0.024    | mg/Kg       | 1      | 9/1/2023 1:19:12 AM   |
| Toluene                          | ND           | 0.048    | mg/Kg       | 1      | 9/1/2023 1:19:12 AM   |
| Ethylbenzene                     | ND           | 0.048    | mg/Kg       | 1      | 9/1/2023 1:19:12 AM   |
| Xylenes, Total                   | ND           | 0.096    | mg/Kg       | 1      | 9/1/2023 1:19:12 AM   |
| Surr: 4-Bromofluorobenzene       | 100          | 39.1-146 | %Rec        | 1      | 9/1/2023 1:19:12 AM   |
| EPA METHOD 300.0: ANIONS         |              |          |             |        | Analyst: RBC          |
| Chloride                         | 1300         | 60       | mg/Kg       | 20     | 8/31/2023 11:15:42 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 3 of 22

Hackberry 18 Fed 2

2308F20-004

**Project:** 

Lab ID:

**Analytical Report** Lab Order 2308F20

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 **CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-16 2' Collection Date: 8/20/2023 9:45:00 AM Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM

| Analyses                             | Result | RL Qu    | ual Units | DF | Date Analyzed         |
|--------------------------------------|--------|----------|-----------|----|-----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE ORG | SANICS |          |           |    | Analyst: <b>DGH</b>   |
| Diesel Range Organics (DRO)          | ND     | 9.7      | mg/Kg     | 1  | 8/31/2023 2:43:46 PM  |
| Motor Oil Range Organics (MRO)       | ND     | 48       | mg/Kg     | 1  | 8/31/2023 2:43:46 PM  |
| Surr: DNOP                           | 101    | 69-147   | %Rec      | 1  | 8/31/2023 2:43:46 PM  |
| EPA METHOD 8015D: GASOLINE RANGE     |        |          |           |    | Analyst: JJP          |
| Gasoline Range Organics (GRO)        | ND     | 4.8      | mg/Kg     | 1  | 9/1/2023 1:42:34 AM   |
| Surr: BFB                            | 91.5   | 15-244   | %Rec      | 1  | 9/1/2023 1:42:34 AM   |
| EPA METHOD 8021B: VOLATILES          |        |          |           |    | Analyst: JJP          |
| Benzene                              | ND     | 0.024    | mg/Kg     | 1  | 9/1/2023 1:42:34 AM   |
| Toluene                              | ND     | 0.048    | mg/Kg     | 1  | 9/1/2023 1:42:34 AM   |
| Ethylbenzene                         | ND     | 0.048    | mg/Kg     | 1  | 9/1/2023 1:42:34 AM   |
| Xylenes, Total                       | ND     | 0.096    | mg/Kg     | 1  | 9/1/2023 1:42:34 AM   |
| Surr: 4-Bromofluorobenzene           | 103    | 39.1-146 | %Rec      | 1  | 9/1/2023 1:42:34 AM   |
| EPA METHOD 300.0: ANIONS             |        |          |           |    | Analyst: RBC          |
| Chloride                             | 1900   | 60       | mg/Kg     | 20 | 8/31/2023 11:28:06 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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**Project:** 

Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Hackberry 18 Fed 2

2308F20-005

**Analytical Report** Lab Order 2308F20

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-17 0' Collection Date: 8/20/2023 10:00:00 AM Received Date: 8/29/2023 7:55:00 AM

|                                     |        | _        |      |       | 0/=//= | 020 /100100 /1101     |
|-------------------------------------|--------|----------|------|-------|--------|-----------------------|
| Analyses                            | Result | RL       | Qual | Units | DF     | Date Analyzed         |
| EPA METHOD 8015M/D: DIESEL RANGE OR | GANICS |          |      |       |        | Analyst: DGH          |
| Diesel Range Organics (DRO)         | ND     | 9.4      |      | mg/Kg | 1      | 8/31/2023 3:07:39 PM  |
| Motor Oil Range Organics (MRO)      | ND     | 47       |      | mg/Kg | 1      | 8/31/2023 3:07:39 PM  |
| Surr: DNOP                          | 148    | 69-147   | S    | %Rec  | 1      | 8/31/2023 3:07:39 PM  |
| EPA METHOD 8015D: GASOLINE RANGE    |        |          |      |       |        | Analyst: JJP          |
| Gasoline Range Organics (GRO)       | ND     | 4.7      |      | mg/Kg | 1      | 9/1/2023 2:06:01 AM   |
| Surr: BFB                           | 93.3   | 15-244   |      | %Rec  | 1      | 9/1/2023 2:06:01 AM   |
| EPA METHOD 8021B: VOLATILES         |        |          |      |       |        | Analyst: JJP          |
| Benzene                             | ND     | 0.023    |      | mg/Kg | 1      | 9/1/2023 2:06:01 AM   |
| Toluene                             | ND     | 0.047    |      | mg/Kg | 1      | 9/1/2023 2:06:01 AM   |
| Ethylbenzene                        | ND     | 0.047    |      | mg/Kg | 1      | 9/1/2023 2:06:01 AM   |
| Xylenes, Total                      | ND     | 0.093    |      | mg/Kg | 1      | 9/1/2023 2:06:01 AM   |
| Surr: 4-Bromofluorobenzene          | 105    | 39.1-146 |      | %Rec  | 1      | 9/1/2023 2:06:01 AM   |
| EPA METHOD 300.0: ANIONS            |        |          |      |       |        | Analyst: RBC          |
| Chloride                            | ND     | 60       |      | mg/Kg | 20     | 8/31/2023 11:40:30 PM |
|                                     |        |          |      |       |        |                       |

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 5 of 22

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-17 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 10:15:00 AM Lab ID: 2308F20-006 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 10 mg/Kg 1 8/31/2023 3:31:38 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/31/2023 3:31:38 PM Surr: DNOP 121 69-147 %Rec 1 8/31/2023 3:31:38 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 2:29:22 AM 5.0 mg/Kg 1 Surr: BFB 91.3 15-244 %Rec 1 9/1/2023 2:29:22 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 2:29:22 AM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 9/1/2023 2:29:22 AM Ethylbenzene ND 0.050 mg/Kg 1 9/1/2023 2:29:22 AM Xylenes, Total ND mg/Kg 1 9/1/2023 2:29:22 AM 0.099 Surr: 4-Bromofluorobenzene 103 39.1-146 %Rec 1 9/1/2023 2:29:22 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 11:52:55 PM ND 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL

Practical Quanitative Limit S

% Recovery outside of standard limits. If undiluted results may be estimated.

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 6 of 22

**Project:** 

Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Hackberry 18 Fed 2

2308F20-007

**Analytical Report** Lab Order 2308F20

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-18 0' Collection Date: 8/20/2023 10:30:00 AM Received Date: 8/29/2023 7:55:00 AM

|                                    |         |          |          | 0  |                      |
|------------------------------------|---------|----------|----------|----|----------------------|
| Analyses                           | Result  | RL Qu    | al Units | DF | Date Analyzed        |
| EPA METHOD 8015M/D: DIESEL RANGE O | RGANICS |          |          |    | Analyst: DGH         |
| Diesel Range Organics (DRO)        | ND      | 9.7      | mg/Kg    | 1  | 8/31/2023 3:55:31 PM |
| Motor Oil Range Organics (MRO)     | ND      | 48       | mg/Kg    | 1  | 8/31/2023 3:55:31 PM |
| Surr: DNOP                         | 117     | 69-147   | %Rec     | 1  | 8/31/2023 3:55:31 PM |
| EPA METHOD 8015D: GASOLINE RANGE   |         |          |          |    | Analyst: JJP         |
| Gasoline Range Organics (GRO)      | ND      | 4.9      | mg/Kg    | 1  | 9/1/2023 2:52:49 AM  |
| Surr: BFB                          | 93.6    | 15-244   | %Rec     | 1  | 9/1/2023 2:52:49 AM  |
| EPA METHOD 8021B: VOLATILES        |         |          |          |    | Analyst: JJP         |
| Benzene                            | ND      | 0.025    | mg/Kg    | 1  | 9/1/2023 2:52:49 AM  |
| Toluene                            | ND      | 0.049    | mg/Kg    | 1  | 9/1/2023 2:52:49 AM  |
| Ethylbenzene                       | ND      | 0.049    | mg/Kg    | 1  | 9/1/2023 2:52:49 AM  |
| Xylenes, Total                     | ND      | 0.098    | mg/Kg    | 1  | 9/1/2023 2:52:49 AM  |
| Surr: 4-Bromofluorobenzene         | 105     | 39.1-146 | %Rec     | 1  | 9/1/2023 2:52:49 AM  |
| EPA METHOD 300.0: ANIONS           |         |          |          |    | Analyst: SNS         |
| Chloride                           | 5000    | 150      | mg/Kg    | 50 | 9/1/2023 7:24:32 AM  |
|                                    |         |          |          |    |                      |

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

\* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-18 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 10:45:00 AM Lab ID: 2308F20-008 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 9.4 mg/Kg 1 8/31/2023 4:19:22 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/31/2023 4:19:22 PM Surr: DNOP 136 69-147 %Rec 1 8/31/2023 4:19:22 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 4.7 9/1/2023 3:16:31 AM mg/Kg 1 Surr: BFB 92.8 15-244 %Rec 1 9/1/2023 3:16:31 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 3:16:31 AM 0.024 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 9/1/2023 3:16:31 AM Ethylbenzene ND 0.047 mg/Kg 1 9/1/2023 3:16:31 AM Xylenes, Total ND 0.095 mg/Kg 1 9/1/2023 3:16:31 AM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 9/1/2023 3:16:31 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 9/1/2023 12:42:33 AM 550 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 8 of 22

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-19 0' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 11:00:00 AM Lab ID: 2308F20-009 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 4:43:15 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/31/2023 4:43:15 PM Surr: DNOP 136 69-147 %Rec 1 8/31/2023 4:43:15 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 3:40:00 AM 4.9 mg/Kg 1 Surr: BFB 91.0 15-244 %Rec 1 9/1/2023 3:40:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 3:40:00 AM 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 9/1/2023 3:40:00 AM Ethylbenzene ND 0.049 mg/Kg 1 9/1/2023 3:40:00 AM Xylenes, Total ND 0.098 mg/Kg 1 9/1/2023 3:40:00 AM Surr: 4-Bromofluorobenzene 102 39.1-146 %Rec 1 9/1/2023 3:40:00 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/1/2023 12:34:08 PM 200 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 9 of 22

**Project:** 

Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Hackberry 18 Fed 2

2308F20-010

**Analytical Report** Lab Order 2308F20

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-19 2' Collection Date: 8/20/2023 11:15:00 AM Received Date: 8/29/2023 7:55:00 AM

| Analyses                            | Result | RL Qu    | al Units | DF | Date Analyzed        |
|-------------------------------------|--------|----------|----------|----|----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE OR | GANICS |          |          |    | Analyst: DGH         |
| Diesel Range Organics (DRO)         | ND     | 10       | mg/Kg    | 1  | 8/31/2023 5:07:20 PM |
| Motor Oil Range Organics (MRO)      | ND     | 50       | mg/Kg    | 1  | 8/31/2023 5:07:20 PM |
| Surr: DNOP                          | 121    | 69-147   | %Rec     | 1  | 8/31/2023 5:07:20 PM |
| EPA METHOD 8015D: GASOLINE RANGE    |        |          |          |    | Analyst: <b>JJP</b>  |
| Gasoline Range Organics (GRO)       | ND     | 4.9      | mg/Kg    | 1  | 9/1/2023 4:03:23 AM  |
| Surr: BFB                           | 94.4   | 15-244   | %Rec     | 1  | 9/1/2023 4:03:23 AM  |
| EPA METHOD 8021B: VOLATILES         |        |          |          |    | Analyst: JJP         |
| Benzene                             | ND     | 0.024    | mg/Kg    | 1  | 9/1/2023 4:03:23 AM  |
| Toluene                             | ND     | 0.049    | mg/Kg    | 1  | 9/1/2023 4:03:23 AM  |
| Ethylbenzene                        | ND     | 0.049    | mg/Kg    | 1  | 9/1/2023 4:03:23 AM  |
| Xylenes, Total                      | ND     | 0.097    | mg/Kg    | 1  | 9/1/2023 4:03:23 AM  |
| Surr: 4-Bromofluorobenzene          | 106    | 39.1-146 | %Rec     | 1  | 9/1/2023 4:03:23 AM  |
| EPA METHOD 300.0: ANIONS            |        |          |          |    | Analyst: SNS         |
| Chloride                            | 860    | 60       | mg/Kg    | 20 | 9/1/2023 1:11:22 PM  |
|                                     |        |          |          |    |                      |

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

- Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix
- D н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-20 0' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 11:30:00 AM Lab ID: 2308F20-011 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 5:31:39 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/31/2023 5:31:39 PM Surr: DNOP 127 69-147 %Rec 1 8/31/2023 5:31:39 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 4:26:46 AM 4.8 mg/Kg 1 Surr: BFB 95.0 15-244 %Rec 1 9/1/2023 4:26:46 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 4:26:46 AM 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 1 9/1/2023 4:26:46 AM Ethylbenzene ND 0.048 mg/Kg 1 9/1/2023 4:26:46 AM Xylenes, Total ND 0.096 mg/Kg 1 9/1/2023 4:26:46 AM Surr: 4-Bromofluorobenzene 107 39.1-146 %Rec 1 9/1/2023 4:26:46 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/5/2023 9:55:04 AM 5000 150 50

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 11 of 22

Date Reported: 9/11/2023

9/1/2023 2:01:01 PM

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-20 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 11:45:00 AM Lab ID: 2308F20-012 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 5:56:18 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/31/2023 5:56:18 PM Surr: DNOP 70.3 69-147 %Rec 1 8/31/2023 5:56:18 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 5:13:34 AM 4.7 mg/Kg 1 Surr: BFB 92.6 15-244 %Rec 1 9/1/2023 5:13:34 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 5:13:34 AM 0.024 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 9/1/2023 5:13:34 AM Ethylbenzene ND 0.047 mg/Kg 1 9/1/2023 5:13:34 AM Xylenes, Total ND 0.094 mg/Kg 1 9/1/2023 5:13:34 AM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 9/1/2023 5:13:34 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS

1600

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Chloride

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

Analyte detected in the associated Method Blank в

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

mg/Kg

20

60

Р Sample pH Not In Range

RL Reporting Limit Page 12 of 22

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-21 0' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 12:00:00 PM Lab ID: 2308F20-013 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 8/31/2023 6:46:17 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/31/2023 6:46:17 PM Surr: DNOP 83.3 69-147 %Rec 1 8/31/2023 6:46:17 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 5:37:03 AM 4.8 mg/Kg 1 Surr: BFB 91.8 15-244 %Rec 1 9/1/2023 5:37:03 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 5:37:03 AM 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 1 9/1/2023 5:37:03 AM Ethylbenzene ND 0.048 mg/Kg 1 9/1/2023 5:37:03 AM Xylenes, Total ND 0.097 mg/Kg 1 9/1/2023 5:37:03 AM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 9/1/2023 5:37:03 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/1/2023 2:13:25 PM 540 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit POL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 13 of 22

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-21 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 12:15:00 PM Lab ID: 2308F20-014 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 7:11:12 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/31/2023 7:11:12 PM Surr: DNOP 138 69-147 %Rec 1 8/31/2023 7:11:12 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 6:00:36 AM 4.8 mg/Kg 1 Surr: BFB 92.6 15-244 %Rec 1 9/1/2023 6:00:36 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 6:00:36 AM 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 1 9/1/2023 6:00:36 AM Ethylbenzene ND 0.048 mg/Kg 1 9/1/2023 6:00:36 AM Xylenes, Total ND 0.095 mg/Kg 1 9/1/2023 6:00:36 AM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 9/1/2023 6:00:36 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/1/2023 2:25:50 PM 620 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 14 of 22

2308F20-015

**Project:** 

Lab ID:

Analyses

**Analytical Report** Lab Order 2308F20

Date Reported: 9/11/2023

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-22 0' Hackberry 18 Fed 2 Collection Date: 8/20/2023 12:30:00 PM Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** EDA METHOD MARMID, DIEGEL DANGE ODOANIO ۸... - 1. . et. DGH

| BANICS |   |  |   | Analyst: DGH  |
|--------|---|--|---|---|
| ND     | 9.7   | mg/Kg  | 1   | 8/31/2023 7:35:58 PM  |
| ND     | 48  | mg/Kg  | 1   | 8/31/2023 7:35:58 PM  |
| 74.8   | 69-147  | %Rec   | 1   | 8/31/2023 7:35:58 PM  |
|        |   |  |   | Analyst: JJP  |
| ND     | 4.8   | mg/Kg  | 1   | 9/1/2023 6:24:03 AM   |
| 95.4   | 15-244  | %Rec   | 1   | 9/1/2023 6:24:03 AM   |
|        |   |  |   | Analyst: JJP  |
| ND     | 0.024   | mg/Kg  | 1   | 9/1/2023 6:24:03 AM   |
| ND     | 0.048   | mg/Kg  | 1   | 9/1/2023 6:24:03 AM   |
| ND     | 0.048   | mg/Kg  | 1   | 9/1/2023 6:24:03 AM   |
| ND     | 0.095   | mg/Kg  | 1   | 9/1/2023 6:24:03 AM   |
| 107    | 39.1-146  | %Rec   | 1   | 9/1/2023 6:24:03 AM   |
|        |   |  |   | Analyst: SNS  |
| 97     | 60  | mg/Kg  | 20  | 9/1/2023 3:03:05 PM   |
|        | ND<br>ND<br>74.8<br>ND<br>95.4<br>ND<br>ND<br>ND<br>ND<br>107 | ND         9.7           ND         48           74.8         69-147           ND         4.8           95.4         15-244           ND         0.024           ND         0.048           ND         0.048           ND         0.095           107         39.1-146 | ND         9.7         mg/Kg           ND         48         mg/Kg           74.8         69-147         %Rec           ND         4.8         mg/Kg           95.4         15-244         %Rec           ND         0.024         mg/Kg           ND         0.048         mg/Kg           ND         0.048         mg/Kg           ND         0.095         mg/Kg           107         39.1-146         %Rec | ND         9.7         mg/Kg         1           ND         48         mg/Kg         1           74.8         69-147         %Rec         1           ND         4.8         mg/Kg         1           95.4         15-244         %Rec         1           ND         0.024         mg/Kg         1           ND         0.048         mg/Kg         1           ND         0.048         mg/Kg         1           ND         0.095         mg/Kg         1           107         39.1-146         %Rec         1 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

ND PQL

Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 15 of 22

Date Reported: 9/11/2023

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-22 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 12:45:00 PM Lab ID: 2308F20-016 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 8:00:44 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/31/2023 8:00:44 PM Surr: DNOP 98.0 69-147 %Rec 1 8/31/2023 8:00:44 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 6:47:28 AM 4.7 mg/Kg 1 Surr: BFB 97.5 15-244 %Rec 1 9/1/2023 6:47:28 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 6:47:28 AM 0.023 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 9/1/2023 6:47:28 AM Ethylbenzene ND 0.047 mg/Kg 1 9/1/2023 6:47:28 AM Xylenes, Total ND 0.094 mg/Kg 1 9/1/2023 6:47:28 AM Surr: 4-Bromofluorobenzene 105 39.1-146 %Rec 1 9/1/2023 6:47:28 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/1/2023 3:15:30 PM 220 60 20

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:** 

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit

RL

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| Client:<br>Project: |           | ex Resources Services, Inc.<br>kberry 18 Fed 2 |  |
|---------------------|-----------|--|--|
| Sample ID:          | MB-77246  | SampType: MBLK                                 | TestCode: EPA Method 300.0: Anions                       |
| Client ID:          | PBS       | Batch ID: 77246                                | RunNo: 99401   |
| Prep Date:          | 8/31/2023 | Analysis Date: 8/31/2023                       | SeqNo: 3627582 Units: mg/Kg                              |
| Analyte             |           |  | e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Chloride            |           | ND 1.5   |  |
| Sample ID:          | LCS-77246 | SampType: LCS                                  | TestCode: EPA Method 300.0: Anions                       |
| Client ID:          | LCSS      | Batch ID: 77246                                | RunNo: 99401   |
| Prep Date:          | 8/31/2023 | Analysis Date: 8/31/2023                       | SeqNo: 3627583 Units: mg/Kg                              |
| Analyte             |           | Result PQL SPK value                           | e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Chloride            |           | 14 1.5 15.00                                   | 0 93.7 90 110  |
| Sample ID:          | MB-77256  | SampType: MBLK                                 | TestCode: EPA Method 300.0: Anions                       |
| Client ID:          | PBS       | Batch ID: 77256                                | RunNo: 99424   |
| Prep Date:          | 9/1/2023  | Analysis Date: 9/1/2023                        | SeqNo: 3629903 Units: mg/Kg                              |
| Analyte             |           | Result PQL SPK value                           | e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Chloride            |           | ND 1.5   |  |
| Sample ID:          | LCS-77256 | SampType: LCS                                  | TestCode: EPA Method 300.0: Anions                       |
| Client ID:          | LCSS      | Batch ID: 77256                                | RunNo: 99424   |
| Prep Date:          | 9/1/2023  | Analysis Date: 9/1/2023                        | SeqNo: 3629904 Units: mg/Kg                              |
| Analyte             |           | Result PQL SPK value                           | e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Chloride            |           | 16 1.5 15.00                                   | 0 105 90 110   |

**Qualifiers:** 

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

| Client:<br>Project: |                | ex Resources Se<br>kberry 18 Fed 2 |                  | Inc.      |             |                   |           |               |           |          |      |
|---------------------|----------------|------------------------------------|------------------|-----------|-------------|-------------------|-----------|---------------|-----------|----------|------|
| Sample ID:          | LCS-77177      | SampT                              | ype: LC          | s         | Tes         | tCode: EF         | PA Method | 8015M/D: Dies | el Range  | Organics |      |
| Client ID:          | LCSS           | Batch                              | ID: 771          | 177       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |          |      |
| Prep Date:          | 8/29/2023      | Analysis D                         | ate: <b>8/</b> 3 | 31/2023   | 5           | SeqNo: <b>36</b>  | 627016    | Units: %Rec   |           |          |      |
| Analyte             |                | Result                             | PQL              | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD      | RPDLimit | Qual |
| Surr: DNOP          | )              | 5.7                                |                  | 5.000     |             | 114               | 69        | 147           |           |          |      |
| Sample ID:          | MB-77177       | SampT                              | уре: МЕ          | BLK       | Tes         | tCode: EF         | PA Method | 8015M/D: Dies | el Range  | Organics |      |
| Client ID:          | PBS            | Batch                              | ID: 771          | 177       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |          |      |
| Prep Date:          | 8/29/2023      | Analysis D                         | ate: <b>8/</b> 3 | 31/2023   | S           | SeqNo: 36         | 627018    | Units: %Rec   |           |          |      |
| Analyte             |                | Result                             | PQL              | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD      | RPDLimit | Qual |
| Surr: DNOP          | )              | 12                                 |                  | 10.00     |             | 116               | 69        | 147           |           |          |      |
| Sample ID:          | LCS-77176      | SampT                              | ype: LC          | S         | Tes         | tCode: EF         | PA Method | 8015M/D: Dies | sel Range | Organics |      |
| Client ID:          | LCSS           | Batch                              | ID: 771          | 176       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |          |      |
| Prep Date:          | 8/29/2023      | Analysis D                         | ate: <b>8/</b> 3 | 31/2023   | S           | SeqNo: 36         | 627544    | Units: %Rec   |           |          |      |
| Analyte             |                | Result                             | PQL              | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD      | RPDLimit | Qual |
| Surr: DNOP          | )              | 5.5                                |                  | 5.000     |             | 109               | 69        | 147           |           |          |      |
| Sample ID:          | LCS-77208      | SampT                              | ype: LC          | S         | Tes         | tCode: EF         | PA Method | 8015M/D: Dies | el Range  | Organics |      |
| Client ID:          | LCSS           | Batch                              | ID: 772          | 208       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |          |      |
| Prep Date:          | 8/30/2023      | Analysis D                         | ate: <b>8/</b> 3 | 31/2023   | S           | SeqNo: 36         | 627545    | Units: mg/Kg  | 9         |          |      |
| Analyte             |                | Result                             | PQL              | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD      | RPDLimit | Qual |
| -                   | Organics (DRO) | 55                                 | 10               | 50.00     | 0           | 110               | 61.9      | 130           |           |          |      |
| Surr: DNOP          | )              | 5.9                                |                  | 5.000     |             | 119               | 69        | 147           |           |          |      |
| Sample ID:          | LCS-77213      | SampT                              | ype: LC          | S         | Tes         | tCode: EF         | PA Method | 8015M/D: Dies | el Range  | Organics |      |
| Client ID:          | LCSS           | Batch                              | ID: 772          | 213       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |          |      |
| Prep Date:          | 8/30/2023      | Analysis D                         | ate: <b>8/</b> 3 | 31/2023   | S           | SeqNo: 36         | 627547    | Units: %Rec   |           |          |      |
| Analyte             |                | Result                             | PQL              | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD      | RPDLimit | Qual |
| Surr: DNOP          | )              | 5.3                                |                  | 5.000     |             | 105               | 69        | 147           |           |          |      |
| Sample ID:          | MB-77176       | SampT                              | ype: ME          | BLK       | Tes         | tCode: EF         | PA Method | 8015M/D: Dies | sel Range | Organics |      |
| Client ID:          | PBS            | Batch                              | ID: 771          | 176       | F           | RunNo: <b>9</b> 9 | 9380      |               |           |          |      |
| Prep Date:          | 8/29/2023      | Analysis D                         | ate: <b>8/</b> 3 | 31/2023   | S           | SeqNo: 36         | 627552    | Units: %Rec   |           |          |      |
| Analyte             |                | Result                             | PQL              | SPK value | SPK Ref Val | %REC              | LowLimit  | HighLimit     | %RPD      | RPDLimit | Qual |
| Surr: DNOP          | )              | 13                                 |                  | 10.00     |             | 126               | 69        | 147           |           |          |      |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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|                                | Resources Services, Inc.<br>rry 18 Fed 2 |  |
|--------------------------------|--|--|
| Sample ID: MB-77208            | SampType: MBLK                           | TestCode: EPA Method 8015M/D: Diesel Range Organics    |
| Client ID: PBS                 | Batch ID: 77208                          | RunNo: 99380   |
| Prep Date: 8/30/2023           | Analysis Date: 8/31/2023                 | SeqNo: <b>3627556</b> Units: <b>mg/Kg</b>              |
| Analyte                        | Result PQL SPK value                     | SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Diesel Range Organics (DRO)    | ND 10                                    |  |
| Motor Oil Range Organics (MRO) | ND 50                                    |  |
| Surr: DNOP                     | 13 10.00                                 | 131 69 147   |
| Sample ID: MB-77213            | SampType: MBLK                           | TestCode: EPA Method 8015M/D: Diesel Range Organics    |
| Client ID: PBS                 | Batch ID: 77213                          | RunNo: 99380   |
| Prep Date: 8/30/2023           | Analysis Date: 8/31/2023                 | SeqNo: 3627557 Units: %Rec                             |
| Analyte                        | Result PQL SPK value                     | SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual |
| Surr: DNOP                     | 11 10.00                                 | 108 69 147   |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#:

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

| Client:<br>Project:   | Vertex Reso<br>Hackberry 1   |   | vices,   | Inc.   |  |  |   |  |  |                      |      |
|---|--|---|--|--|--|--|---|--|--|----------------------|------|
| -   | · · · · · ·  |   |  |  |  |  |   |  |  |                      |      |
| Sample ID: Ics-7  |  | SampTyp   | -  | -  |  |  |   | 8015D: Gasol   | ine Range                              |                      |      |
| Client ID: LCS  | -  | Batch I   |  |  |  | RunNo: 9   |   |  |  |                      |      |
| Prep Date: 8/3  | <b>60/2023</b> A   | Analysis Dat  | ie: <b>9/</b> 1  | 1/2023   |  | SeqNo: 3   | 627635  | Units: mg/K  | g                                      |                      |      |
| Analyte   |  |   | PQL  |  | SPK Ref Val  | %REC   | LowLimit  | HighLimit  | %RPD                                   | RPDLimit             | Qual |
| Gasoline Range Orga<br>Surr: BFB  | anics (GRO)  | 22<br>1900  | 5.0  | 25.00<br>1000  | 0  | 88.2<br>193  | 70<br>15  | 130<br>244   |  |                      |      |
| Sample ID: mb-  | 77198  | SampTyp   | be: MB   | BLK  | Tes  | tCode: El  | PA Method   | 8015D: Gasol   | ine Range                              |                      |      |
| Client ID: PBS  | ;  | Batch I   | D: 771   | 198  | F  | RunNo: 9   | 9366  |  |  |                      |      |
| Prep Date: 8/3  | <b>60/2023</b> A   | Analysis Dat  | ie: <b>9/</b> 1  | 1/2023   | S  | SeqNo: 3   | 627636  | Units: mg/K  | g                                      |                      |      |
| Analyte   | l  | Result  | PQL  | SPK value  | SPK Ref Val  | %REC   | LowLimit  | HighLimit  | %RPD                                   | RPDLimit             | Qual |
| Gasoline Range Orga<br>Surr: BFB  | anics (GRO)  | ND<br>940   | 5.0  | 1000   |  | 93.9   | 15  | 244  |  |                      |      |
| Sample ID: Ics-7  | 77172  | SampTyp   | be: LC   | s  | Tes  | tCode: El  | PA Method   | 8015D: Gasol   | ine Range                              |                      |      |
| Client ID: LCS  | S  | Batch I   | D: 771   | 172  | F  | RunNo: 9   | 9411  |  |  |                      |      |
| Prep Date: 8/2  | <b>9/2023</b> A  | Analysis Dat  | ie: 9/2  | 2/2023   | S  | SeqNo: 3   | 628857  | Units: %Rec  |  |                      |      |
| Analyte   | l  | Result  | PQL  | SPK value  | SPK Ref Val  | %REC   | LowLimit  | HighLimit  | %RPD                                   | RPDLimit             | Qual |
|   |  |   |  |  |  |  |   |  |  |                      |      |
| Surr: BFB   |  | 1900  |  | 1000   |  | 191  | 15  | 244  |  |                      |      |
| Sample ID: mb-  | 77172  | 1900<br>SampTyp   | De: MB   |  | Tes  |  |   | 244<br>8015D: Gasol  | ine Range                              |                      |      |
|   |  |   |  | BLK  |  |  | PA Method   |  | ine Range                              |                      |      |
| Sample ID: mb-  | ;  | SampTyp   | D: 771   | BLK<br>172   | F  | tCode: E   | PA Method<br>9411   |  | •                                      |                      |      |
| Sample ID: mb-  | 9 <b>/2023</b> A   | SampTyr<br>Batch I  | D: 771   | BLK<br>172   | F  | tCode: El<br>RunNo: 9  | PA Method<br>9411   | 8015D: Gasol   | •                                      | RPDLimit             | Qual |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2  | 9 <b>/2023</b> A   | SampTyp<br>Batch I<br>Analysis Dat  | D: 771<br>:e: 9/2  | BLK<br>172<br>2/2023   | F  | tCode: El<br>RunNo: 9<br>SeqNo: 3  | PA Method<br>9411<br>628859   | 8015D: Gasol<br>Units: %Rec  | ·                                      |                      | Qual |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2<br>Analyte   | 9 <b>/2023</b> A   | SampTyp<br>Batch I<br>Analysis Dat<br>Result  | D: <b>771</b><br>re: <b>9/2</b><br>PQL   | BLK<br>172<br>2/2023<br>SPK value<br>1000  | F<br>SPK Ref Val   | tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>93.5  | PA Method<br>9411<br>628859<br>LowLimit<br>15   | 8015D: Gasol<br>Units: %Rec<br>HighLimit   | %RPD                                   | RPDLimit             | Qual |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2<br>Analyte<br>Surr: BFB<br>Sample ID: 2308   | 9 <b>/2023</b> A   | SampTyp<br>Batch I<br>Analysis Dat<br>Result<br>940   | D: 771<br>re: 9/2<br>PQL<br>De: MS   | BLK<br>172<br>2/2023<br>SPK value<br>1000  | F<br>SPK Ref Val<br>Tes                                      | tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>93.5  | PA Method<br>9411<br>628859<br>LowLimit<br>15<br>PA Method  | 8015D: Gasol<br>Units: %Rec<br>HighLimit<br>244  | %RPD                                   | RPDLimit             | Qual |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2<br>Analyte<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2   | 3<br>19/2023 A<br>19/20-001ams<br>13-15 0'   | SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>940<br>SampTyr  | D: 771<br>re: 9/2<br>PQL<br>De: MS<br>D: 771   | BLK<br>172<br>2/2023<br>SPK value<br>1000  | F<br>SPK Ref Val<br>Tes<br>F                                 | tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>93.5<br>tCode: El   | PA Method<br>9411<br>628859<br>LowLimit<br>15<br>PA Method<br>9411  | 8015D: Gasol<br>Units: %Rec<br>HighLimit<br>244  | %RPD                                   | RPDLimit             | Qual |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2<br>Analyte<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2   | 3<br>9/2023 A<br>3f20-001ams<br>13-15 0'<br>10/2023 A  | SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>940<br>SampTyr<br>Batch I<br>Analysis Dat                                       | D: 771<br>re: 9/2<br>PQL<br>De: MS<br>D: 771   | 3LK<br>172<br>2/2023<br>SPK value<br>1000<br>5<br>1998<br>1/2023   | F<br>SPK Ref Val<br>Tes<br>F                                 | tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>93.5<br>tCode: El<br>RunNo: 9<br>SeqNo: 3   | PA Method<br>9411<br>628859<br>LowLimit<br>15<br>PA Method<br>9411  | 8015D: Gasol<br>Units: %Rec<br>HighLimit<br>244<br>8015D: Gasol  | %RPD                                   | RPDLimit             | Qual |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2<br>Analyte<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2<br>Prep Date: 8/3   | 3<br>9/2023 A<br>3f20-001ams<br>13-15 0'<br>10/2023 A  | SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>940<br>SampTyr<br>Batch I<br>Analysis Dat                                       | D: 771<br>PQL<br>De: MS<br>D: 771<br>de: 9/1   | 3LK<br>172<br>2/2023<br>SPK value<br>1000<br>5<br>1998<br>1/2023   | F<br>SPK Ref Val<br>Tes<br>F<br>S                            | tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>93.5<br>tCode: El<br>RunNo: 9<br>SeqNo: 3   | PA Method<br>9411<br>628859<br>LowLimit<br>15<br>PA Method<br>9411<br>628886<br>LowLimit<br>70                                      | 8015D: Gasol<br>Units: %Rec<br>HighLimit<br>244<br>8015D: Gasol<br>Units: mg/K   | %RPD                                   | RPDLimit             |      |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2<br>Analyte<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2<br>Prep Date: 8/3<br>Analyte  | 3<br>9/2023 A<br>3f20-001ams<br>13-15 0'<br>10/2023 A  | SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>940<br>SampTyr<br>Batch I<br>Analysis Dat<br>Result                             | D: 771<br>PQL<br>De: <b>MS</b><br>D: 771<br>re: 9/1<br>PQL   | BLK<br>172<br>2/2023<br>SPK value<br>1000<br>3<br>198<br>1/2023<br>SPK value                                     | F<br>SPK Ref Val<br>Tes<br>F<br>SPK Ref Val                  | tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>93.5<br>tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC   | PA Method<br>9411<br>628859<br>LowLimit<br>15<br>PA Method<br>9411<br>628886<br>LowLimit  | 8015D: Gasol<br>Units: %Rec<br>HighLimit<br>244<br>8015D: Gasol<br>Units: mg/Kg<br>HighLimit   | %RPD                                   | RPDLimit             |      |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2<br>Analyte<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2<br>Prep Date: 8/3<br>Analyte<br>Gasoline Range Orga   | 3720-001ams<br>3720-001ams<br>3-15 0'<br>30/2023 A<br>anics (GRO)                              | SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>940<br>SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>23                       | D: 771<br>PQL<br>De: MS<br>D: 771<br>re: 9/1<br>PQL<br>5.0   | BLK<br>172<br>2/2023<br>SPK value<br>1000<br>3<br>198<br>1/2023<br>SPK value<br>24.85<br>994.0                   | F<br>SPK Ref Val<br>Tes<br>F<br>SPK Ref Val<br>0             | tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>93.5<br>tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>92.8<br>203                                      | PA Method<br>9411<br>628859<br>LowLimit<br>15<br>PA Method<br>9411<br>628886<br>LowLimit<br>70<br>15                                | 8015D: Gasol<br>Units: %Rec<br>HighLimit<br>244<br>8015D: Gasol<br>Units: mg/Ke<br>HighLimit<br>130  | %RPD<br>ine Range<br>g<br>%RPD         | RPDLimit<br>RPDLimit |      |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2<br>Analyte<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2<br>Prep Date: 8/3<br>Analyte<br>Gasoline Range Orga<br>Surr: BFB  | 3720-001ams<br>3720-001ams<br>3-15 0'<br>30/2023 A<br>anics (GRO)                              | SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>940<br>SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>23<br>2000               | D: 771<br>re: 9/2<br>PQL<br>De: MS<br>D: 771<br>re: 9/1<br>PQL<br>5.0<br>De: MS                      | BLK<br>172<br>2/2023<br>SPK value<br>1000<br>5<br>198<br>1/2023<br>SPK value<br>24.85<br>994.0<br>5              | F<br>SPK Ref Val<br>Tes<br>SPK Ref Val<br>0<br>Tes           | tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>93.5<br>tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>92.8<br>203                                      | PA Method<br>9411<br>628859<br>LowLimit<br>15<br>PA Method<br>9411<br>628886<br>LowLimit<br>70<br>15<br>PA Method                   | 8015D: Gasol<br>Units: %Rec<br>HighLimit<br>244<br>8015D: Gasol<br>Units: mg/Ke<br>HighLimit<br>130<br>244                                 | %RPD<br>ine Range<br>g<br>%RPD         | RPDLimit<br>RPDLimit |      |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2<br>Analyte<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2<br>Prep Date: 8/3<br>Analyte<br>Gasoline Range Orga<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2                   | 3720-001ams<br>3720-001ams<br>33-15 0'<br>30/2023 A<br>anics (GRO)<br>3720-001amsd<br>33-15 0' | SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>940<br>SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>23<br>2000<br>SampTyr    | D: 771<br>re: 9/2<br>PQL<br>De: MS<br>D: 771<br>re: 9/1<br>PQL<br>5.0<br>De: MS<br>D: 771            | 3LK<br>172<br>2/2023<br>SPK value<br>1000<br>3<br>198<br>1/2023<br>SPK value<br>24.85<br>994.0<br>3<br>5<br>198  | F<br>SPK Ref Val<br>Tes<br>SPK Ref Val<br>0<br>Tes<br>F      | tCode: E<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>93.5<br>tCode: E<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>92.8<br>203<br>tCode: E                            | PA Method<br>9411<br>628859<br>LowLimit<br>15<br>PA Method<br>9411<br>628886<br>LowLimit<br>70<br>15<br>PA Method<br>9411           | 8015D: Gasol<br>Units: %Rec<br>HighLimit<br>244<br>8015D: Gasol<br>Units: mg/Ke<br>HighLimit<br>130<br>244                                 | %RPD<br>ine Range<br>%RPD<br>ine Range | RPDLimit<br>RPDLimit |      |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2<br>Analyte<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2<br>Prep Date: 8/3<br>Analyte<br>Gasoline Range Orga<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2                   | 3720-001ams<br>33-15 0'<br>30/2023 A<br>anics (GRO)<br>3720-001amsd<br>33-15 0'<br>30/2023 A   | SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>940<br>SampTyr<br>Batch I<br>Analysis Dat<br>SampTyr<br>Batch I<br>Analysis Dat | D: 771<br>re: 9/2<br>PQL<br>De: MS<br>D: 771<br>re: 9/1<br>PQL<br>5.0<br>De: MS<br>D: 771            | 3LK<br>172<br>2/2023<br>SPK value<br>1000<br>3<br>198<br>1/2023<br>SPK value<br>24.85<br>994.0<br>3<br>5<br>198  | F<br>SPK Ref Val<br>Tes<br>SPK Ref Val<br>0<br>Tes<br>F<br>S | tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>93.5<br>tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>92.8<br>203<br>tCode: El<br>RunNo: 9             | PA Method<br>9411<br>628859<br>LowLimit<br>15<br>PA Method<br>9411<br>628886<br>LowLimit<br>70<br>15<br>PA Method<br>9411           | 8015D: Gasol<br>Units: %Rec<br>HighLimit<br>244<br>8015D: Gasol<br>Units: mg/Kg<br>HighLimit<br>130<br>244<br>8015D: Gasol                 | %RPD<br>ine Range<br>%RPD<br>ine Range | RPDLimit<br>RPDLimit |      |
| Sample ID: mb-<br>Client ID: PBS<br>Prep Date: 8/2<br>Analyte<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2<br>Prep Date: 8/3<br>Analyte<br>Gasoline Range Orga<br>Surr: BFB<br>Sample ID: 2308<br>Client ID: BH2<br>Prep Date: 8/3 | 3720-001ams<br>33-15 0'<br>36/2023 A<br>anics (GRO)<br>3720-001amsd<br>33-15 0'<br>36/2023 A   | SampTyr<br>Batch I<br>Analysis Dat<br>Result<br>940<br>SampTyr<br>Batch I<br>Analysis Dat<br>SampTyr<br>Batch I<br>Analysis Dat | D: 771<br>re: 9/2<br>PQL<br>De: MS<br>D: 771<br>re: 9/1<br>PQL<br>5.0<br>De: MS<br>D: 771<br>re: 9/1 | BLK<br>172<br>2/2023<br>SPK value<br>1000<br>198<br>1/2023<br>SPK value<br>24.85<br>994.0<br>50<br>198<br>1/2023 | F<br>SPK Ref Val<br>Tes<br>SPK Ref Val<br>0<br>Tes<br>F<br>S | tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>93.5<br>tCode: El<br>RunNo: 9<br>SeqNo: 3<br>%REC<br>92.8<br>203<br>tCode: El<br>RunNo: 9<br>SeqNo: 3 | PA Method<br>9411<br>628859<br>LowLimit<br>15<br>PA Method<br>9411<br>628886<br>LowLimit<br>70<br>15<br>PA Method<br>9411<br>628887 | 8015D: Gasol<br>Units: %Rec<br>HighLimit<br>244<br>8015D: Gasol<br>Units: mg/Kg<br>HighLimit<br>130<br>244<br>8015D: Gasol<br>Units: mg/Kg | %RPD<br>ine Range<br>%RPD<br>ine Range | RPDLimit             | Qual |

**Qualifiers:** 

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е
- J
- Sample pH Not In Range
- RL Reporting Limit

2308F20

11-Sep-23

WO#:

Above Quantitation Range/Estimated Value

- Analyte detected below quantitation limits
- Р

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

| Client:<br>Project:  | Vertex Re<br>Hackberry  |   | ,   | Inc.   |  |   |   |   |                                      |                      |      |
|--|---|---|---|--|--|---|---|---|--------------------------------------|----------------------|------|
| Sample ID:   | LCS-77198   | Samp  | Гуре: <b>LC</b>   | s  | Tes  | tCode: EF   | A Method  | 8021B: Volat  | iles                                 |                      |      |
| Client ID:   | LCSS  | Batc  | h ID: <b>77</b> 1   | 198  | F  | RunNo: <b>9</b> 9   | 366   |   |                                      |                      |      |
| Prep Date:   | 8/30/2023   | Analysis [  | Date: <b>9/</b> *   | 1/2023   | S  | SeqNo: <b>36</b>  | 627740  | Units: <b>mg/K</b>  | g                                    |                      |      |
| Analyte  |   | Result  | PQL   | SPK value  | SPK Ref Val  | %REC  | LowLimit  | HighLimit   | %RPD                                 | RPDLimit             | Qual |
| Benzene  |   | 1.1   | 0.025   | 1.000  | 0  | 106   | 70  | 130   |                                      |                      |      |
| Toluene  |   | 1.0   | 0.050   | 1.000  | 0  | 105   | 70  | 130   |                                      |                      |      |
| Ethylbenzene   |   | 1.1   | 0.050   | 1.000  | 0  | 106   | 70  | 130   |                                      |                      |      |
| Xylenes, Total   |   | 3.2   | 0.10  | 3.000  | 0  | 106   | 70  | 130   |                                      |                      |      |
| Surr: 4-Brom   | ofluorobenzene  | 1.1   |   | 1.000  |  | 106   | 39.1  | 146   |                                      |                      |      |
| Sample ID:   | mb-77198  | Samp  | Гуре: <b>МЕ</b>   | BLK  | Tes  | tCode: EF   | A Method  | 8021B: Volat  | iles                                 |                      |      |
| Client ID:   | PBS   | <b>3S</b> Batch ID: <b>77198</b> RunNo: <b>99366</b>  |   |  |  |   |   |   |                                      |                      |      |
| Prep Date:   | 8/30/2023   | Analysis [  | Date: <b>9/</b> *   | 1/2023   | 5  | SeqNo: 36   | 627741  | Units: <b>mg/K</b>  | (g                                   |                      |      |
| Analyte  |   | Result  | PQL   | SPK value  | SPK Ref Val  | %REC  | LowLimit  | HighLimit   | %RPD                                 | RPDLimit             | Qual |
| Benzene  |   | ND  | 0.025   |  |  |   |   |   |                                      |                      |      |
| Toluene  |   | ND  | 0.050   |  |  |   |   |   |                                      |                      |      |
| Ethylbenzene   |   | ND  | 0.050   |  |  |   |   |   |                                      |                      |      |
| Xylenes, Total   |   | ND  | 0.10  |  |  |   |   |   |                                      |                      |      |
| Surr: 4-Brom   | ofluorobenzene  | 1.1   |   | 1.000  |  | 106   | 39.1  | 146   |                                      |                      |      |
| Sample ID:   | 2308f20-002ams  | Samp  | Гуре: <b>МS</b>   | ;  | Tes  | tCode: EF   | PA Method   | 8021B: Volat  | iles                                 |                      |      |
|  |   |   |   |  |  |   |   |   |                                      |                      |      |
| Client ID:   | BH23-15 2'  | Batc  | h ID: 771   | 198  | F  | RunNo: <b>9</b> 9   | 9411  |   |                                      |                      |      |
| Client ID:<br>Prep Date:   | BH23-15 2'<br>8/30/2023                                       | Batc<br>Analysis [  |   |  |  | RunNo: <b>99</b><br>SeqNo: <b>36</b>  |   | Units: <b>mg/K</b>  | ģ                                    |                      |      |
| Prep Date:   |   |   |   | <b>1/2023</b><br>SPK value   | S  |   |   | Units: <b>mg/K</b><br>HighLimit   | <b>⁄g</b><br>%RPD                    | RPDLimit             | Qual |
| Prep Date:<br>Analyte  |   | Analysis I<br>Result<br>1.0   | Date: <b>9/</b><br>PQL<br>0.024   | 1/2023<br>SPK value<br>0.9756  | SPK Ref Val  | SeqNo: 36<br>%REC<br>105  | <b>528941</b><br>LowLimit<br>70   | HighLimit<br>130  | -                                    | RPDLimit             | Qual |
| Prep Date:<br>Analyte<br>Benzene<br>Foluene  |   | Analysis I<br>Result<br>1.0<br>1.0  | Date: <b>9/</b> *<br>PQL<br>0.024<br>0.049  | 1/2023<br>SPK value<br>0.9756<br>0.9756  | SPK Ref Val<br>0<br>0  | SeqNo: 36<br>%REC<br>105<br>106   | 28941<br>LowLimit<br>70<br>70   | HighLimit<br>130<br>130   | -                                    | RPDLimit             | Qual |
| Prep Date:<br>Analyte<br>Benzene<br>Foluene  |   | Analysis I<br>Result<br>1.0<br>1.0<br>1.0   | Date: <b>9/</b><br>PQL<br>0.024   | 1/2023<br>SPK value<br>0.9756  | SPK Ref Val  | SeqNo: 36<br>%REC<br>105  | <b>528941</b><br>LowLimit<br>70   | HighLimit<br>130  | -                                    | RPDLimit             | Qual |
| Prep Date:<br>Analyte<br>Benzene<br>Foluene<br>Ethylbenzene  |   | Analysis I<br>Result<br>1.0<br>1.0  | Date: <b>9/</b> *<br>PQL<br>0.024<br>0.049  | 1/2023<br>SPK value<br>0.9756<br>0.9756  | SPK Ref Val<br>0<br>0  | SeqNo: 36<br>%REC<br>105<br>106   | 28941<br>LowLimit<br>70<br>70   | HighLimit<br>130<br>130   | -                                    | RPDLimit             | Qual |
| Prep Date:<br>Analyte<br>Benzene<br>Foluene<br>Ethylbenzene<br>Kylenes, Total  |   | Analysis I<br>Result<br>1.0<br>1.0<br>1.0   | Date: <b>9/</b><br>PQL<br>0.024<br>0.049<br>0.049   | 1/2023<br>SPK value<br>0.9756<br>0.9756<br>0.9756  | SPK Ref Val<br>0<br>0<br>0   | SeqNo: 36<br>%REC<br>105<br>106<br>107  | 28941<br>LowLimit<br>70<br>70<br>70   | HighLimit<br>130<br>130<br>130  | -                                    | RPDLimit             | Qual |
| Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Brom  | 8/30/2023   | Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.2<br>1.0   | Date: <b>9/</b><br>PQL<br>0.024<br>0.049<br>0.049   | 1/2023<br>SPK value<br>0.9756<br>0.9756<br>0.9756<br>2.927<br>0.9756   | SPK Ref Val<br>0<br>0<br>0<br>0                                      | SeqNo: 36<br>%REC<br>105<br>106<br>107<br>109<br>107  | 28941<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1   | HighLimit<br>130<br>130<br>130<br>130   | %RPD                                 | RPDLimit             | Qual |
| Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Brom<br>Sample ID:  | 8/30/2023   | Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.2<br>1.0<br>Samp <sup>-</sup>  | Date: <b>9</b> /<br>PQL<br>0.024<br>0.049<br>0.049<br>0.098   | 1/2023<br>SPK value<br>0.9756<br>0.9756<br>0.9756<br>2.927<br>0.9756   | SPK Ref Val<br>0<br>0<br>0<br>0<br>0<br>Tes                          | SeqNo: 36<br>%REC<br>105<br>106<br>107<br>109<br>107  | 228941<br>LowLimit<br>70<br>70<br>70<br>70<br>70<br>39.1<br>24 Method   | HighLimit<br>130<br>130<br>130<br>130<br>130<br>146   | %RPD                                 | RPDLimit             | Qual |
| Prep Date:<br>Analyte<br>Benzene<br>Foluene<br>Ethylbenzene<br>Kylenes, Total<br>Surr: 4-Brom<br>Sample ID:<br>Client ID:  | 8/30/2023<br>hofluorobenzene<br>2308f20-002amsd               | Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.2<br>1.0<br>Samp <sup>-</sup>  | Date: 9/<br>PQL<br>0.024<br>0.049<br>0.049<br>0.098<br>Type: MS<br>h ID: 771                                      | 1/2023<br>SPK value<br>0.9756<br>0.9756<br>0.9756<br>2.927<br>0.9756<br>5D   | SPK Ref Val<br>0<br>0<br>0<br>0<br>0<br>Tes<br>F                     | SeqNo: 36<br>%REC<br>105<br>106<br>107<br>109<br>107<br>tCode: EF   | 289941<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1<br>PA Method<br>9411   | HighLimit<br>130<br>130<br>130<br>130<br>130<br>146   | %RPD                                 | RPDLimit             | Qual |
| Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Brom<br>Sample ID:  | 8/30/2023<br>tofluorobenzene<br>2308f20-002amsd<br>BH23-15 2' | Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.2<br>1.0<br>Samp<br>Batc<br>Analysis I<br>Result                     | Date: 9/<br>PQL<br>0.024<br>0.049<br>0.049<br>0.098<br>Type: MS<br>h ID: 771<br>Date: 9/<br>PQL                   | 1/2023<br>SPK value<br>0.9756<br>0.9756<br>2.927<br>0.9756<br>5D<br>198<br>1/2023<br>SPK value                         | SPK Ref Val<br>0<br>0<br>0<br>0<br>0<br>Tes<br>F                     | SeqNo: 36<br>%REC<br>105<br>106<br>107<br>109<br>107<br>tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC               | 228941<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1<br>24<br>A Method<br>0411<br>528942<br>LowLimit  | HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volat<br>Units: mg/K<br>HighLimit                      | %RPD<br>iles<br>%g<br>%RPD           | RPDLimit             | Qual |
| Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Brom<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte                       | 8/30/2023<br>tofluorobenzene<br>2308f20-002amsd<br>BH23-15 2' | Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.2<br>1.0<br>Samp <sup>T</sup><br>Batc<br>Analysis I                  | Date: 9/<br>PQL<br>0.024<br>0.049<br>0.049<br>0.098<br>Type: MS<br>h ID: 771<br>Date: 9/                          | 1/2023<br>SPK value<br>0.9756<br>0.9756<br>2.927<br>0.9756<br>50<br>198<br>1/2023                                      | SPK Ref Val<br>0<br>0<br>0<br>0<br>0<br>Tes<br>F                     | SeqNo: 36<br>%REC<br>105<br>106<br>107<br>109<br>107<br>tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>105        | 228941<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1<br>24 Method<br>9411<br>528942   | HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volat<br>Units: mg/K                                   | %RPD                                 |                      |      |
| Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Kylenes, Total<br>Surr: 4-Brom<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene            | 8/30/2023<br>tofluorobenzene<br>2308f20-002amsd<br>BH23-15 2' | Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.2<br>1.0<br>Samp<br>Batc<br>Analysis I<br>Result                     | Date: 9/<br>PQL<br>0.024<br>0.049<br>0.049<br>0.098<br>Type: MS<br>h ID: 771<br>Date: 9/<br>PQL                   | 1/2023<br>SPK value<br>0.9756<br>0.9756<br>2.927<br>0.9756<br>5D<br>198<br>1/2023<br>SPK value                         | SPK Ref Val<br>0<br>0<br>0<br>0<br>0<br>Tes<br>F<br>SPK Ref Val      | SeqNo: 36<br>%REC<br>105<br>106<br>107<br>109<br>107<br>tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC               | 228941<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1<br>24<br>A Method<br>0411<br>528942<br>LowLimit  | HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volat<br>Units: mg/K<br>HighLimit                      | %RPD<br>iles<br>%g<br>%RPD           | RPDLimit             |      |
| Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Kylenes, Total<br>Surr: 4-Brom<br>Sample ID:<br>Client ID:<br>Prep Date:<br>Analyte<br>Benzene<br>Toluene | 8/30/2023<br>tofluorobenzene<br>2308f20-002amsd<br>BH23-15 2' | Analysis I<br>Result<br>1.0<br>1.0<br>1.0<br>3.2<br>1.0<br>Samp <sup>T</sup><br>Batc<br>Analysis I<br>Result<br>1.0 | Date: 9/<br>PQL<br>0.024<br>0.049<br>0.049<br>0.098<br>Type: MS<br>h ID: 771<br>Date: 9/<br>PQL<br>0.024          | 1/2023<br>SPK value<br>0.9756<br>0.9756<br>2.927<br>0.9756<br>198<br>1/2023<br>SPK value<br>0.9737                     | SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>FR<br>SPK Ref Val<br>0     | SeqNo: 36<br>%REC<br>105<br>106<br>107<br>109<br>107<br>tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>105        | 228941<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1<br>24<br>Method<br>9411<br>528942<br>LowLimit<br>70  | HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volat<br>Units: mg/K<br>HighLimit<br>130               | %RPD<br>iles<br>59<br>%RPD<br>0.586  | RPDLimit<br>20       |      |
| Prep Date:<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>Xylenes, Total<br>Surr: 4-Brom<br>Sample ID:<br>Client ID:<br>Prep Date:                                  | 8/30/2023<br>tofluorobenzene<br>2308f20-002amsd<br>BH23-15 2' | Analysis I<br>Result<br>1.0<br>1.0<br>3.2<br>1.0<br>Samp<br>Batcl<br>Analysis I<br>Result<br>1.0<br>1.0             | Date: 9/<br>PQL<br>0.024<br>0.049<br>0.049<br>0.098<br>Fype: MS<br>h ID: 771<br>Date: 9/<br>PQL<br>0.024<br>0.049 | 1/2023<br>SPK value<br>0.9756<br>0.9756<br>2.927<br>0.9756<br>30<br>30<br>30<br>30<br>30<br>30<br>30<br>30<br>30<br>30 | SPK Ref Val<br>0<br>0<br>0<br>0<br>Tes<br>F<br>SPK Ref Val<br>0<br>0 | SeqNo: 36<br>%REC<br>105<br>106<br>107<br>109<br>107<br>tCode: EF<br>RunNo: 99<br>SeqNo: 36<br>%REC<br>105<br>107 | 228941<br>LowLimit<br>70<br>70<br>70<br>70<br>39.1<br>24 Method<br>0411<br>528942<br>LowLimit<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70 | HighLimit<br>130<br>130<br>130<br>130<br>146<br>8021B: Volat<br>Units: mg/k<br>HighLimit<br>130<br>130<br>130 | %RPD<br>iles<br>59<br>0.586<br>0.690 | RPDLimit<br>20<br>20 |      |

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#: 2308F20

| Client:<br>Project:                  | Vertex Resources S<br>Hackberry 18 Fed 2 | ,   |                  |                  |                 |      |          |      |
|--------------------------------------|--|---|------------------|------------------|-----------------|------|----------|------|
| Sample ID: LCS-77                    |  | Type: LCS                                   |                  |                  | 8021B: Volatile | es   |          |      |
| Client ID: LCSS<br>Prep Date: 8/29/2 |  | h ID: <b>77172</b><br>Date: <b>9/2/2023</b> | RunNo:<br>SeqNo: | 99411<br>3628971 | Units: %Rec     |      |          |      |
| Analyte                              | Result                                   | PQL SPK value                               | SPK Ref Val %REC | C LowLimit       | HighLimit       | %RPD | RPDLimit | Qual |
| Surr: 4-Bromofluorober               | izene 1.1                                | 1.000                                       | 108              | 3 39.1           | 146             |      |          |      |
| Sample ID: mb-771                    | 72 Samp1                                 | Гуре: <b>MBLK</b>                           | TestCode:        | EPA Method       | 8021B: Volatile | s    |          |      |
| Client ID: PBS                       | Batcl                                    | h ID: <b>77172</b>                          | RunNo:           | 99411            |                 |      |          |      |
| Prep Date: 8/29/2                    | 023 Analysis [                           | Date: 9/2/2023                              | SeqNo:           | 3628973          | Units: %Rec     |      |          |      |
| Analyte                              | Result                                   | PQL SPK value                               | SPK Ref Val %REC | C LowLimit       | HighLimit       | %RPD | RPDLimit | Qual |
| Surr: 4-Bromofluorober               | izene 1.0                                | 1.000                                       | 10               | 5 39.1           | 146             |      |          |      |

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2308F20

11-Sep-23

WO#:

#### **Released to Imaging: 3/5/2024 11:07:34 AM**

| HALL<br>ENVIRONMENTAL<br>ANALYSIS<br>LABORATORY   | TEL: 505-345-3975        | 4901 Hawkins Ni<br>querque, NM 8710 | e<br>9 <b>San</b><br>7 | nple Log-In C                       | Check List           |
|---|--------------------------|-------------------------------------|------------------------|-------------------------------------|----------------------|
| Client Name: Vertex Resources<br>Services, Inc.   | Work Order Number:       | 2308F20                             |                        | RcptNo                              | : 1                  |
| Received By: Tracy Casarrubias 8  | /29/2023 7:55:00 AM      | 2. ·                                |                        |                                     |                      |
| Completed By: Tracy Casarrubias 8   | /29/2023 8:40:51 AM      |                                     |                        |                                     |                      |
| Reviewed By: 18 8-24-23   |                          |                                     |                        |                                     |                      |
| Chain of Custody  |                          |                                     | _                      | _                                   |                      |
| 1. Is Chain of Custody complete?  |                          | Yes 🗌                               | No 🗹                   | Not Present                         |                      |
| 2. How was the sample delivered?  |                          | Courier                             |                        |                                     |                      |
| Log In<br>3. Was an attempt made to cool the samples?                                     |                          | Yes 🔽                               | No 🗌                   | NA 🗌                                |                      |
| 4. Were all samples received at a temperature of  | >0° C to 6.0°C           | Yes 🔽                               | No 🗌                   | NA 🗌                                |                      |
| 5. Sample(s) in proper container(s)?  |                          | Yes 🗹                               | No 🗌                   |                                     |                      |
| 6. Sufficient sample volume for indicated test(s)?  |                          | Yes 🗹                               | No 🗌                   |                                     |                      |
| $7_{\rm \cdot}$ Are samples (except VOA and ONG) properly p                               | reserved?                | Yes 🗹                               | No 🗌                   |                                     |                      |
| 8. Was preservative added to bottles?   |                          | Yes 🗌                               | No 🗹                   | NA 🗌                                |                      |
| 9. Received at least 1 vial with headspace <1/4" fo                                       | or AQ VOA?               | Yes 🗌                               | No 🗌                   | NA 🗹                                |                      |
| 10. Were any sample containers received broken?   |                          | Yes                                 | No 🗹                   | # of preserved                      |                      |
| 11. Does paperwork match bottle labels?<br>(Note discrepancies on chain of custody)       |                          | Yes 🗹                               | No 🗌                   | bottles checked<br>for pH:<br>(<2 c | or >12 unless noted) |
| 12. Are matrices correctly identified on Chain of Cu                                      | stody?                   | Yes 🗹                               | No 🗌                   | Adjusted?                           |                      |
| 13. Is it clear what analyses were requested?   |                          | Yes 🗹                               | No 🗌                   |                                     | Alachan              |
| 14. Were all holding times able to be met?<br>(If no, notify customer for authorization.) |                          | Yes 🗹                               | No 🗌                   | Checked by:                         | 1~8/29/23            |
| Special Handling (if applicable)  |                          |                                     |                        |                                     |                      |
| 15. Was client notified of all discrepancies with this                                    | s order?                 | Yes 🗌                               | No 🗌                   | NA 🗹                                |                      |
| Person Notified:  | Date:                    |                                     |                        |                                     |                      |
| By Whom:  | Via:                     | 🗋 eMail 🔄 Pho                       | ne 🗌 Fax               | In Person                           |                      |
| Regarding:  |                          |                                     |                        |                                     |                      |
| Client Instructions: Mailing address.pho  | one number and Email/    | Fax are missing c                   | on COC- TN             | IC 8/29/23                          |                      |
| 16. Additional remarks:   |                          |                                     |                        |                                     |                      |
| 17. <u>Cooler Information</u><br>Cooler No Temp ⁰C Condition Seal<br>1 0 Good Yes         | Intact Seal No S<br>Yogi | Seal Date Si                        | igned By               |                                     |                      |

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| ceived by OCD: 11/1/2023 1:09:31 PM  |  | Page 136 of 1.  |
|--------------------------------------|--|---|
| Chain-of-Custody Record              | Turn-Around Time:  | HALL ENVIRONMENTAL  |
| client: Vertex (Devan)               | Standard Rush 5 DAM  | ANALYSIS LABORATORY   |
| VELIER LDEVUNS                       | Project Name:  | www.hallenvironmental.com   |
| Nailing Address: On file             | Hackberry 18 Fed 2   | 4901 Hawkins NE - Albuquerque, NM 87109   |
| Oh Gile                              | Project #:   | Tel. 505-345-3975 Fax 505-345-4107  |
|                                      | 23E-03903  | Analysis Request  |
| hone #:<br>mail or Fax#:             | Project Manager:   | sent) SO4   |
| A/QC Package:                        |  | s (802<br>0 / MR<br>PCB's<br>PO <sub>4</sub> , 9  |
| Standard   Level 4 (Full Validation) | Kent Stallings   | TMB's (8021)<br>/ DRO / MRO)<br>8082 PCB's<br>4.1)<br>- 8270SIMS<br>NO <sub>2</sub> , PO <sub>4</sub> , SO<br>NO <sub>2</sub> , PO <sub>4</sub> , SO  |
| ccreditation:   Az Compliance        | Sampler: Zach Englishert   | F   2   8   4   2     2   2   5   5   |
| NELAC 🗆 Other                        |  |   |
| EDD (Type)                           | # of Coolers: 1<br>Cooler Temp(including CF): 0.1-0.1=0 (°C)   | BTEX ) MTBE / TI<br>TPH:8915D(GRO /<br>8081 Pesticides/80<br>EDB (Method 504.<br>PAHs by 8310 or 8<br>RCRA 8 Metals<br>CI, F, Br, NO <sub>3</sub> , N<br>8260 (VOA)<br>8270 (Semi-VOA)<br>8270 (Semi-VOA) |
|                                      |  |   |
|                                      | ContainerPreservativeHEAL No.Type and #Type2308F20   | 808 B21 CC CC B4 EDE 808 B1E  |
| ate Time Matrix Sample Name          |  |   |
|                                      |  |   |
| 9:15 BH23-15 2                       | 500  |   |
| 9:31 BH23-16 0                       | 003  |   |
| 9:45 BH23-16 2                       | 004  |   |
| 10:00 BH23-17 0-                     | 005  |   |
| 10:15 BH23-17 2'                     | 006  |   |
| 10:30 BH23-18 0'                     | f 00   |   |
| 10:45 BH23-18 2                      | 008  |   |
| 11:00 BH23-19 0-                     | 009  |   |
| 11:15 BH23- 19 2                     | 010  |   |
| 11:30 BH23-20 0                      | 011  |   |
| V 1145 V BH23-20 2                   | Received by: Via: Date Time  | Remarks:  |
| Date: Time: Relinquished by:         | hereinen of  | (c) aharris Gvertex.ca  |
|                                      | Received by: Via:Court Date Time   | Kstallings Qvertex.ca   |
| Date: Time: Relinquished by:         | 8/29/27 7: SJ  | Direct Bill to Devon  |
| 120/3 1900 Circum                    | The source of th | this possibility. Any sub-contracted data will be clearly notated on the analytical report.   |

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| Received | by | OCD: | 11/1/2023 | 1:09:31 PM |
|----------|----|------|-----------|------------|
|----------|----|------|-----------|------------|

| eceived l         | by OCD:                | 11/1/202           | 3 1:09:31 PM              |  |   |                                       |              |                             |                      |             |                          |               |                                     |                 |                                 |           | Page     | e 137 o | f 138 |
|-------------------|------------------------|--------------------|---------------------------|--|---|---------------------------------------|--------------|-----------------------------|----------------------|-------------|--------------------------|---------------|-------------------------------------|-----------------|---------------------------------|-----------|----------|---------|-------|
| Client:           |                        |                    | stody Record              | Turn-Around                            |   | 5 Davi                                |              |                             |                      |             |                          |               |                                     |                 |                                 |           |          |         | ,     |
|                   | Client: Vertex (Devon) |                    |                           | Project Name                           | Project Name:   |                                       |              |                             |                      |             |                          |               | nviron                              |                 |                                 |           | ~ ` `    |         |       |
| Mailing           | Address                | : or               | file                      | Project #:                             | eriy 18   | ted 2                                 |              |                             |                      |             |                          |               |                                     |                 |                                 | /1 8710   | 9        |         |       |
|                   |                        |                    |                           |  | 02000   |                                       | -            | Te                          | el. 50               | 5-34        | 5-397                    | _             |                                     |                 | -345-4                          | 4107      |          |         |       |
| Phone #           | <i>t</i> :             | 1.0-               |                           |  | -03903  |                                       |              |                             | 1000                 |             |                          |               | alysis<br>+                         | Req             |                                 |           | a second |         |       |
| email or          | Fax#:                  |                    |                           | Project Mana                           | iger:   |                                       | 3            | l Ő                         | s                    |             |                          |               | 500                                 |                 | sent                            |           |          |         |       |
| QA/QC F<br>□ Stan | -                      |                    | Level 4 (Full Validation  | n) Kent                                | Stallin   | 95                                    | TMB's (8021) | N/OS                        | PCB's                |             | OSIM:                    |               | , rO4,                              |                 | ent/Abs                         | - 310     |          |         |       |
|                   | tation:                | □ Az Co<br>□ Other | mpliance                  | Sampler: 2<br>On Ice:                  | 1ch ₽<br>Ves  | DNO MOGI                              |              | SO / DF                     | s/8082               | 504.1)      | or 827                   | 5             | " NO2                               | (Y              | (Prese                          | 5 - 15    |          |         |       |
|                   |                        |                    |                           | # of Coolers:                          | and the second se |                                       |              | 5                           | cide                 | po          | 310                      | etal          |                                     | l-ĭ             | E                               |           |          |         |       |
|                   |                        | Matrix             | Sample Name               | Cooler Temp<br>Container<br>Type and # | )(Including CF): 0<br>Preservative<br>Type  |                                       | BTEX) MTBE / | TPA: 8015D(GRO / DRO / MRO) | 8081 Pesticides/8082 | EDB (Method | PAHs by 8310 or 8270SIMS | RCRA 8 Metals | UI)F, Br, NU3, NU2, F<br>8260 (VOA) | 8270 (Semi-VOA) | Total Coliform (Present/Absent) |           |          |         |       |
|                   |                        |                    | BH23-21 0-                | liar                                   | ice   | 013                                   | TY           | $\square$                   |                      |             |                          |               |                                     | 197243          |                                 | 201       |          |         |       |
| 0-2023            |                        | soil               | 0.101                     | - Jui                                  | 100   |                                       |              | $\square$                   |                      |             |                          |               |                                     |                 |                                 | echaran'i |          |         |       |
|                   | 12:15                  |                    | RA23-21 2'<br>B 1+23-22 0 |  |   | 014                                   |              |                             |                      |             |                          |               | $\mathbf{H}$                        |                 |                                 | 12 2      |          |         |       |
|                   | 12:45                  |                    | BH73-22 2                 |  | V   | 016                                   | V            | V                           |                      |             |                          |               | 4                                   |                 |                                 |           |          |         | -     |
|                   |                        |                    |                           |  |   |                                       |              |                             |                      |             | +                        | +             | _                                   | -               | $\square$                       |           |          |         | +     |
|                   |                        |                    |                           |  |   |                                       |              |                             |                      |             | $\neg$                   |               |                                     |                 |                                 | i se      |          |         |       |
|                   |                        |                    |                           |  |   |                                       |              |                             |                      |             |                          |               |                                     |                 |                                 |           |          |         | _     |
|                   |                        |                    |                           |  |   | on sel8 ≥ 1000 - • 12 0               |              | <u> </u>                    |                      |             |                          |               |                                     | _               | -                               |           |          |         | +     |
|                   |                        |                    |                           |  |   |                                       |              |                             |                      |             | _                        |               |                                     |                 |                                 |           |          |         | _     |
|                   |                        |                    |                           | -0                                     |   |                                       |              |                             |                      |             |                          | _             |                                     | -               |                                 |           |          |         |       |
|                   |                        |                    |                           |  |   |                                       |              |                             |                      |             |                          |               |                                     |                 |                                 |           | -        |         |       |
| Date:             | Time:                  | Relinquis          |                           | Received by:<br>MMMM<br>Received by:   | Via:  | Date Time<br>8/28/23 845<br>Date Time | Re           | mark                        | s:                   |             |                          |               |                                     |                 |                                 |           |          |         |       |
| Date:             | Time:                  | Relinquis          | $AAAAA = \infty$          | Received by:                           | Via: Caun-  | 8/29/27 7:55                          | 5            |                             |                      | D           |                          |               |                                     | di.             |                                 |           |          |         |       |

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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

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Action 281842

CONDITIONS

| Operator:                           | OGRID:                                    |
|-------------------------------------|---|
| DEVON ENERGY PRODUCTION COMPANY, LP | 6137                                      |
| 333 West Sheridan Ave.              | Action Number:                            |
| Oklahoma City, OK 73102             | 281842                                    |
|                                     | Action Type:                              |
|                                     | [C-141] Release Corrective Action (C-141) |

#### CONDITIONS

Created By Condition Condition Date rhamlet The Remediation Plan is Conditionally Approved. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation 3/5/2024 samples should be delineated/excavated to meet closure criteria standards from Table 1 of the OCD Spill Rule for site assessment/characterization/proven depth to water determination. Sidewall/Edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Please collect confirmation samples, representing no more than 200 ft2. All sidewall samples should be taken from the sidewall of the excavation. Please make sure that the edge of the release extent is accurately defined. All off pad areas must meet reclamation standards set forth in the OCD Spill Rule. The work will need to occur in 90 days after the report has been reviewed.