



December 18, 2024

New Mexico Oil Conservation Division
District 1 – Lea County
1625 N. French Drive
Hobbs, New Mexico 88240

RE: Variance Request
Incident #: NAPP2307633795
J & J Investments, Inc.
Shahara Unit State #8 Injection Line
Vertex #: 24E-04470

NMOCD:

On the behalf of J & J Investments, Vertex respectfully asks for variance approval to the Closure Criteria per Table 1 of 19.15.29 NMAC and 19.15.29.13 NMAC.

Closure Criteria in the approved reclamation plan, where depth to water is greater than 100 feet below ground surface (bgs), is defined as:

- Upper 4 feet (most stringent closure criteria)
 - Chloride < 600 mg/kg
 - TPH (GRO + DRO + MRO) < 100 mg/kg
 - BTEX < 50 mg/kg
 - Benzene < 10 mg/kg
- Below 4 feet
 - Chloride < 20,000 mg/kg
 - TPH (GRO + DRO + MRO) < 2,500 mg/kg
 - TPH (GRO + DRO) < 1,000 mg/kg
 - BTEX < 50 mg/kg
 - Benzene < 10 mg/kg.

The approved remediation plan determined depth-to-water is approximately 198 feet bgs.



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Plate 1 shows the current excavation extent, where:

- The 1 to 2 foot deep remediation area northeast of the southeast-northwest transection pipeline (DCP Line), exhibited very hard caliche.
- Underlying the DCP Line at 3 feet below ground surface (bgs) is the same very hard caliche found northeast of the pipeline.
- The 4.2 foot deep remediation area southwest of the DCP Line the very hard caliche at the 1 to 2 foot depth was not present. Medium dense caliche was encountered.

Plate 2 shows confirmation soil sample locations symbolized by whether soils concentrations meet Closure Criteria.

- Note that wall grid sample WS24-04 is currently being excavated further west and confirmation soil sample analytical is pending.
- The base samples that exceed Closure Criteria, denoted by BS24-##, within the very hard caliche layer is the subject of the variance request.
- Excavation base sample grid areas subject to the variance request are color coded.

The following figures demonstrate the very hard caliche. Videos are available upon request showing the efforts involved trying to break through the caliche.



Figure 1: Rippers on the bulldozer could not breakup the hard caliche. The rear of the dozer was lifted (circled red) by putting all the pressure on the rippers. October 10, 2024.



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Figure 2: Sharks Teeth put on bucket of trackhoe to attempt to break through the hard caliche. October 11, 2024.



Figure 3: Trackhoe with Sharks Teeth attempting to break through the hard caliche in the 1 to 2 foot area. October 11, 2024.



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After unsuccessful attempts to break through the caliche layer within the 1 to 2 foot area, excavation was resumed along the DCP Line. A soft spot in the caliche near the southern edge of the DCP Line trench was encountered while using the Sharks Teeth on the trackhoe bucket. The DCP Line was subsequently struck causing an unauthorized release of natural gas. DCP's safety pressure valves automatically shut-in the line. DCP's environmental emergency response team (Tasman Environmental) was mobilized. Tasman Environmental determined that the release volume was unreportable according to 19.15.29 NMAC.

After DCP allowed access to the area, the entire excavated extent was cleared of residual material and soil confirmation samples collected starting on December 4, 2024. Five-point composite soil samples were collected within each sample grid not exceeding 300 sq ft, per the variance request in the approved remediation plan.

Table 1 provides a summary of the analytical. Laboratory Certificate of Analysis is located in Attachment 2.

Table 2: Areas of Variance Request

| Area | | Sample ID | Average Chloride |
|------|------------------------------------------------------------|---------------------------------------------|----------------------------|
| 1 | North and central areas of the 1 to 2 foot excavated area. | BS24-10, BS24-11, BS24-15, BS24-17, BS24-24 | 1,232 mg/kg |
| 2 | North and East of DCP Line | BS24-29, BS24-30, BS24-31, BS24-32 | 960 mg/kg |
| 3 | Under the DCP Line South Wall of DCP Line | BS24-33, BS24-34, BS24-35 WS24-05 | 2,024 mg/kg 5,780 mg/kg |

To further support the variance request, Vertex conducted a plant survey (Attachment 1) to demonstrate that the root zone does not penetrate the caliche at 1 to 2 feet bgs. As shown in Attachment 1, plant roots only penetrate the subsurface to a depth of approximately 1 ft 3 inches. The plant survey concludes that the plant root zone does not extend into the caliche.

As described in the Geology section of the approved remediation plan, nearby driller logs obtained from the Office of the State Engineer suggests that the caliche observed at 1 to 2 feet below ground surface ranges in thickness between 8 to 24 feet thick.

The presence of the hard caliche retards downward migration of surface water infiltration as evident by the 1.) inability for heavy mechanical equipment to penetrate the caliche and 2.) limited root zone penetration as supported by the plant survey. Factoring in a depth-to-water of 198 feet and a minimum 8 foot caliche thickness, potential impact to groundwater is unlikely.



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The variance request is limited to the four areas presented in Table 2 within the hard caliche layer. Please refer to Plate 2 mapping areas of variance request. We look forward to NMOCD's response.

Thank you,

A handwritten signature in black ink, appearing to read 'Andrew Parker'. The signature is fluid and cursive, with the first name 'Andrew' being more prominent than the last name 'Parker'.

Andrew Parker
Senior Project Manager
Vertex Resource Services Inc
c: (575) 689-7007

TABLES

Client Name: J & J Investments, Inc
 Site Name: Shahara Unit State #8
 Incident ID: NAPP2307633795
 Project #: 24E-04470
 Lab Report(s): H247442

| Table 1. Summary of Confirmation Samples | | | | | | | | | | |
|------------------------------------------|------------|-------------|------------------------|--------------|-------------------------------|-----------------------------|--------------------------------|-------------|------------------------------------|-----------|
| Sample Description | | | Petroleum Hydrocarbons | | | | | | | Inorganic |
| Sample ID | Depth (ft) | Sample Date | Volatile | | Extractable | | | | | |
| | | | Benzene | BTEX (Total) | Gasoline Range Organics (GRO) | Diesel Range Organics (DRO) | Motor Oil Range Organics (MRO) | (GRO + DRO) | Total Petroleum Hydrocarbons (TPH) | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | | | |
| Depth to Groundwater >100' | | | | | | | | | | |
| BS24 - 01 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 96 |
| BS24 - 02 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 64 |
| BS24 - 03 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 64 |
| BS24 - 04 | 2' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 80 |
| BS24 - 05 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 128 |
| BS24 - 06 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 64 |
| BS24 - 07 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 32 |
| BS24 - 08 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 80 |
| BS24 - 09 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 272 |
| BS24 - 10 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 1150 |
| BS24 - 11 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 1520 |
| BS24 - 12 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 368 |
| BS24 - 13 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 528 |
| BS24 - 14 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 144 |
| BS24 - 15 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 768 |
| BS24 - 16 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 496 |
| BS24 - 17 | 2.5' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 1760 |
| BS24 - 18 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 448 |
| BS24 - 19 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 176 |
| BS24 - 20 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 96 |
| BS24 - 21 | 2.5' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 512 |
| BS24 - 22 | 2' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 192 |
| BS24 - 23 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 48 |
| BS24 - 24 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 960 |
| BS24 - 25 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 592 |
| BS24 - 26 | 1' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 592 |
| BS24 - 27 | 2' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 448 |
| BS24 - 28 | 2' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 368 |
| BS24 - 29 | 2' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 1300 |
| BS24 - 30 | 2' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 668 |
| BS24 - 31 | 2.5' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 1170 |
| BS24 - 32 | 2' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 704 |
| BS24 - 33 | 3' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 992 |
| BS24 - 34 | 3' | 12/4/2024 | ND | ND | ND | ND | ND | ND | ND | 4360 |
| BS24 - 35 | 3' | 12/4/2024 | ND | ND | ND | ND | 12.6 | ND | 12.6 | 720 |
| BS24 - 36 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 1010 |
| BS24 - 37 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 288 |
| BS24 - 38 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 2000 |

Client Name: J & J Investments, Inc
 Site Name: Shahara Unit State #8
 Incident ID: NAPP2307633795
 Project #: 24E-04470
 Lab Report(s): H247442

| Table 1. Summary of Confirmation Samples | | | | | | | | | | | | | | | |
|------------------------------------------|------------|-------------|------------------------|--------------|-------------------------------|-----------------------------|--------------------------------|-------------|------------------------------------|----------------------------|---------|---------|---------|---------|---------|
| Sample Description | | | Petroleum Hydrocarbons | | | | | | | Inorganic | | | | | |
| Sample ID | Depth (ft) | Sample Date | Volatile | | Extractable | | | | | | | | | | |
| | | | Benzene | BTEX (Total) | Gasoline Range Organics (GRO) | Diesel Range Organics (DRO) | Motor Oil Range Organics (MRO) | (GRO + DRO) | Total Petroleum Hydrocarbons (TPH) | | | | | | |
| | | | | | | | | | | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| | | | | | | | | | | Depth to Groundwater >100' | | | | | |
| BS24 - 39 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 2560 | | | | | |
| BS24 - 40 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 3920 | | | | | |
| BS24 - 41 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 2760 | | | | | |
| BS24 - 42 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 1840 | | | | | |
| BS24 - 43 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 1570 | | | | | |
| BS24 - 44 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 6400 | | | | | |
| BS24 - 45 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 4160 | | | | | |
| BS24 - 46 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 1880 | | | | | |
| BS24 - 47 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 176 | | | | | |
| BS24 - 48 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 816 | | | | | |
| BS24 - 49 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 160 | | | | | |
| BS24 - 50 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 48 | | | | | |
| BS24 - 51 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 208 | | | | | |
| BS24 - 52 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 32 | | | | | |
| BS24 - 53 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 668 | | | | | |
| BS24 - 54 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 96 | | | | | |
| BS24 - 55 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 144 | | | | | |
| BS24 - 56 | 4.2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 1250 | | | | | |
| WS24 - 01 | 0-1' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 352 | | | | | |
| WS24 - 02 | 0-1' | 12/5/2024 | ND | ND | ND | 10.4 | 27.3 | 10.4 | 37.7 | 192 | | | | | |
| WS24 - 03 | 0-2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 48 | | | | | |
| WS24 - 03 | 2-4' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 64 | | | | | |
| WS24 - 04 | 0-2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 800 | | | | | |
| WS24 - 04.1 | 0-2' | Pending | - | - | - | - | - | - | - | - | | | | | |
| WS24 - 04 | 2-4' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 304 | | | | | |
| WS24 - 05 | 0-2' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 8400 | | | | | |
| WS24 - 05 | 2-4' | 12/5/2024 | ND | ND | ND | ND | ND | ND | ND | 3160 | | | | | |

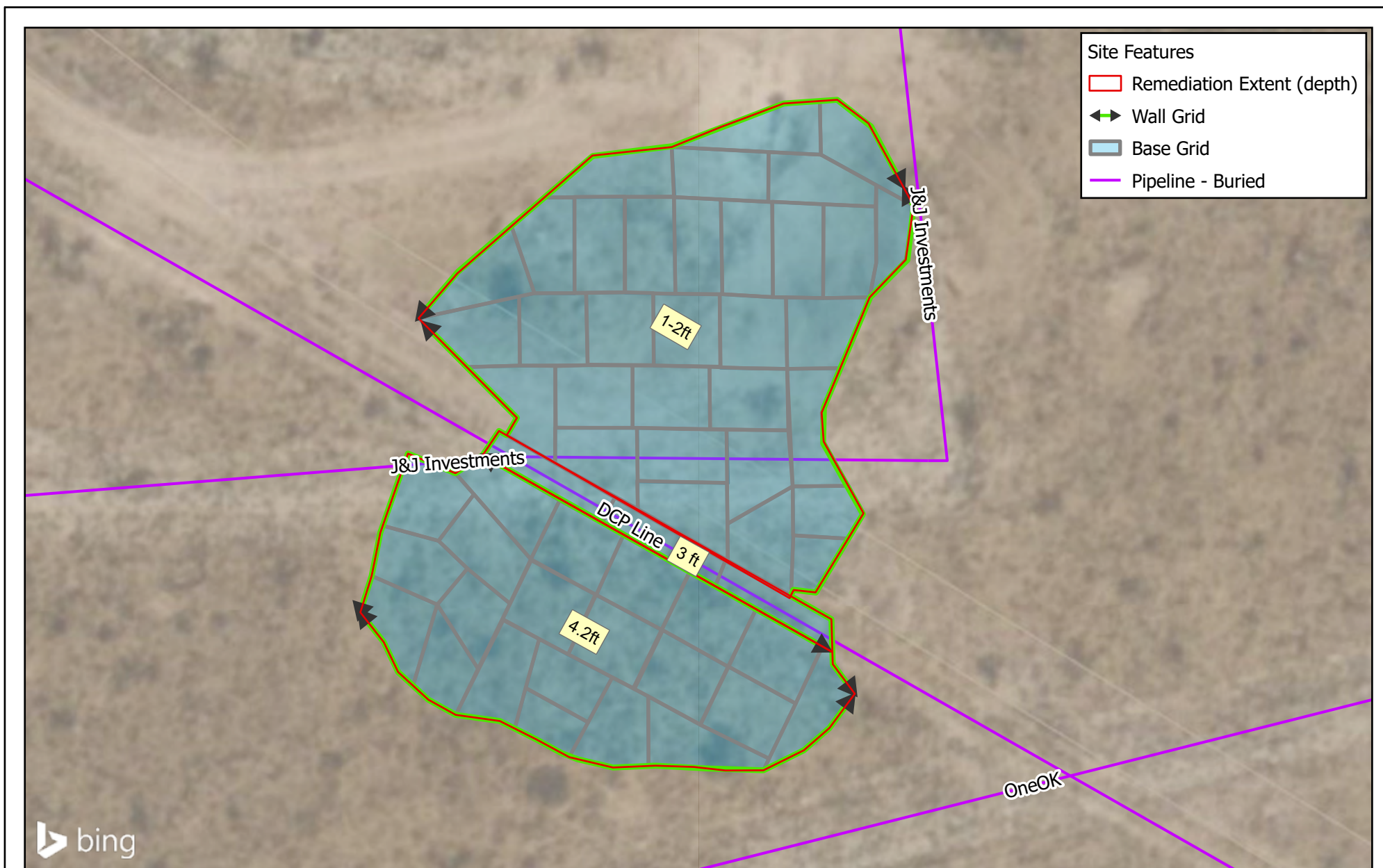
"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Grey shaded indicates sample excavated

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

PLATES



0 15 30 ft

NAD 1983 StatePlane New Mexico East FIPS 3001 Feet

Map Center:
Lat/Long: 32.828929°N, 103.670468°W

Date: Dec 17/24



Current Excavation Extent with Depths Shahara Unit State #8

Plate:

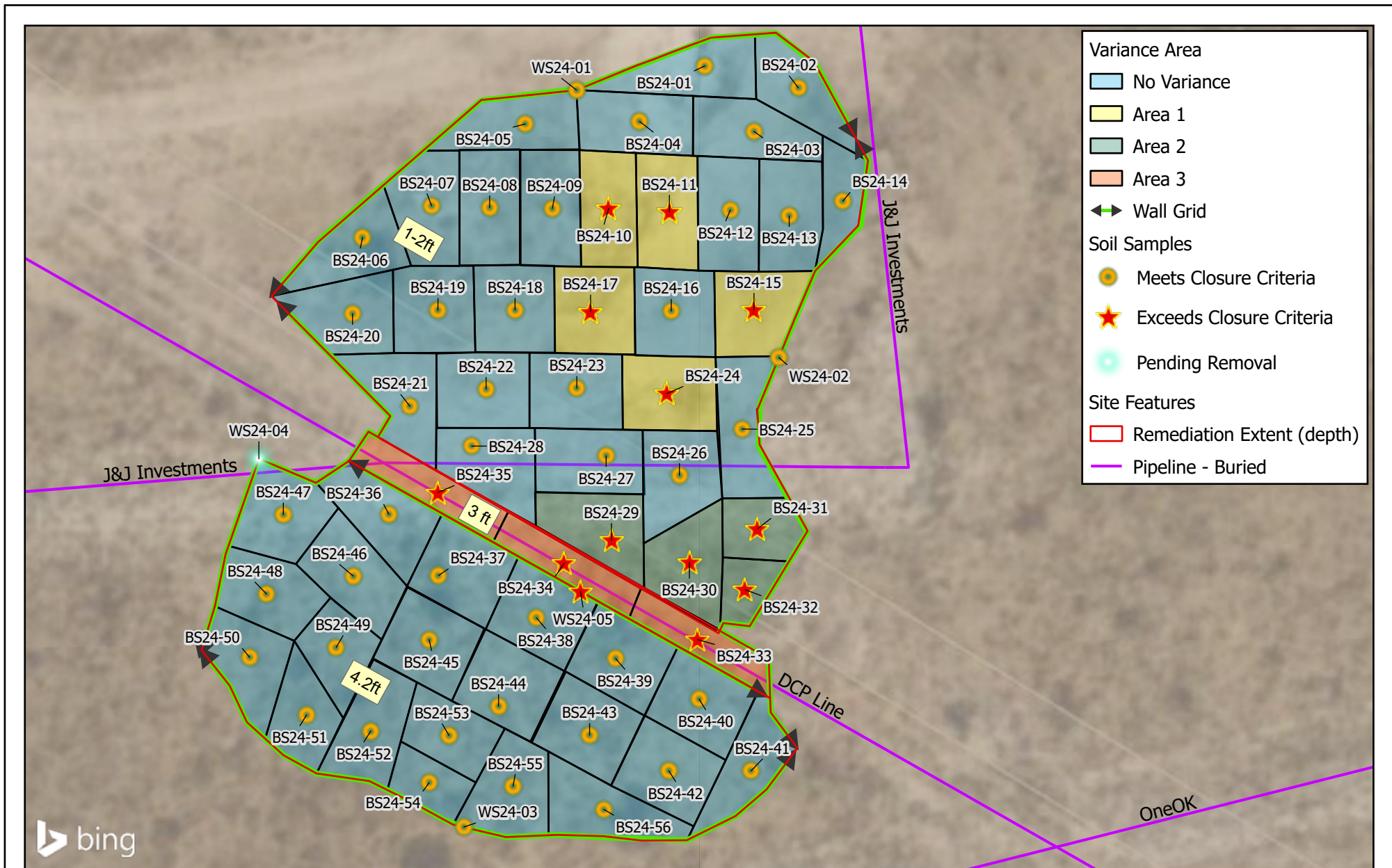
1

J & J Investments

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2024. Site features from GPS, Vertex, 2024.

VERSATILITY. EXPERTISE.



Map Center:
Lat/Long: 32.828933°N, 103.670407°W
Date: Dec 17/24
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet



Variance Areas Shahara Unit State #8

Plate:

2

J & J Investments

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2024. Site features from GPS, Vertex, 2024.

VERSATILITY. EXPERTISE.

ATTACHMENT 1

Daily Site Visit Report



| | | | |
|------------------------|-----------------------------|-----------------|------------|
| Client | J&J Investments, LLC | Inspection Date | 10/14/2024 |
| Site Location Name | Shahara State Unit #008 INJ | API # | |
| Client Contact Name | Jason Ciempa | Project Owner | |
| Client Contact Phone # | 575-677-2148 | Project Manager | |
| Project Reference # | | | |
| Unique Project ID | | | |

Summary of Times

| | |
|-----------------|--------------------|
| Arrived at Site | 10/14/2024 8:50 AM |
| Departed Site | 10/14/2024 1:37 PM |

Field Notes

- 11:55** Completed safety paper work upon arrival
- 11:56** Examined the roots in the excavation walls down to 4.2ft and found no evidence of rooting past 1ft 4inches.
- 12:06** Identified 4 different species which compose of the majority of the plant community in the areas surround the excavation: honey mesquite, broom snakeweed, leatherweed, and a species of Galleta grasses
- 13:24** The walls were field screened to where it can be reasonably assumed confirmation samples would be clean

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: South



Roots present in only the top 1ft and 3 inches

Viewing Direction: Southeast



Roots present in only the top 1ft and 3 inches

Viewing Direction: Southeast



No evidence rooting from 1ft 3in to 4ft in the excavation

Viewing Direction: Southwest



An area from 0-4ft which notes the color change from the rich O layer soil (with roots) to the hard bed rock where the plant roots do not appear to penetrate.



Daily Site Visit Report

Viewing Direction: Northeast



Leatherweed present northeast of the release

Viewing Direction: Northeast



Broom snakeweed present northeast of the release

Viewing Direction: Northeast



Honey mesquites present south east of release

Viewing Direction: Northeast



Galleta grasses present north east of the excavation



Daily Site Visit Report

Viewing Direction: Southwest



Two leaved senna present sparsely north east of the excavation

Viewing Direction: South



Honey Mesquite root 4 inches below the surface with no mesquites within 23 ft. Representing the presence of shallow roots with a wide lateral extent opposed to deep root systems.

Daily Site Visit Report



Viewing Direction: South



Excavation south of the pipeline at the end of the day

Viewing Direction: West



Area north west of the pipeline at the end of the day. The walls were taken out about 8ft and the base in the center was excavated to three ft

Viewing Direction: Northeast



Northeast side of the excavation at the end of the day

Viewing Direction: North



North side of the excavation defined

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:

A handwritten signature in black ink, appearing to be 'KT', written over a horizontal line. Below the line, the word 'Signature' is printed in a small font.

ATTACHMENT 2



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

December 13, 2024

ANDREW PARKER
VERTEX RESOURCE
3101 BOYD DRIVE
CARLSBAD, NM 88220

RE: SHAHARA STATE UNIT #008 INJ

Enclosed are the results of analyses for samples received by the laboratory on 12/09/24 11:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene
Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

| | | | |
|-------------------|-----------------------------|---------------------|----------------|
| Received: | 12/09/2024 | Sampling Date: | 12/05/2024 |
| Reported: | 12/13/2024 | Sampling Type: | Soil |
| Project Name: | SHAHARA STATE UNIT #008 INJ | Sampling Condition: | Cool & Intact |
| Project Number: | 24E-04470 | Sample Received By: | Tamara Oldaker |
| Project Location: | J & J INVESTMENTS | | |

Sample ID: WS24 - 01 @ 0-1' (H247442-01)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 352 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS24 - 02 @ 0-1' (H247442-02)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 98.3 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 192 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | 10.4 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | 27.3 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS24 - 03 @ 0-2' (H247442-03)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 48.0 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS24 - 03 @ 2-4' (H247442-04)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 71.5-134

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 64.0 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 120 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS24 - 04 @ 0-2' (H247442-05)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 95.4 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 800 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS24 - 04 @ 2-4' (H247442-06)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 304 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 129 % 48.2-134

Surrogate: 1-Chlorooctadecane 135 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS24 - 05 @ 0-2' (H247442-07)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 8400 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS24 - 05 @ 2-4' (H247442-08)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 3160 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 128 % 48.2-134

Surrogate: 1-Chlorooctadecane 134 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 01 @ 1' (H247442-09)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 96.0 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 124 % 48.2-134

Surrogate: 1-Chlorooctadecane 130 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 02 @ 1' (H247442-10)

| BTX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 64.0 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 117 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 03 @ 1' (H247442-11)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | | |
| Total BTEx | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 71.5-134

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 64.0 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 04 @ 2' (H247442-12)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 80.0 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
ANDREW PARKER
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 12/09/2024
Reported: 12/13/2024
Project Name: SHAHARA STATE UNIT #008 INJ
Project Number: 24E-04470
Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS24 - 05 @ 1' (H247442-13)

| BTX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 128 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 06 @ 1' (H247442-14)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 94.2 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 64.0 | 16.0 | 12/09/2024 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 128 % 48.2-134

Surrogate: 1-Chlorooctadecane 135 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 07 @ 1' (H247442-15)

| BTX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 32.0 | 16.0 | 12/09/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 08 @ 1' (H247442-16)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 80.0 | 16.0 | 12/09/2024 | ND | 448 | 112 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 09 @ 1' (H247442-17)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 272 | 16.0 | 12/09/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 10 @ 1' (H247442-18)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1150 | 16.0 | 12/09/2024 | ND | 448 | 112 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 123 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 11 @ 1' (H247442-19)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1520 | 16.0 | 12/09/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/10/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/10/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/10/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 12 @ 1' (H247442-20)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.20 | 110 | 2.00 | 1.58 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 1.65 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.09 | 105 | 2.00 | 2.13 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.24 | 104 | 6.00 | 2.14 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 368 | 16.0 | 12/09/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/10/2024 | ND | 216 | 108 | 200 | 3.49 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/10/2024 | ND | 198 | 99.2 | 200 | 4.17 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/10/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 90.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 13 @ 1' (H247442-21)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 528 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 88.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 14 @ 1' (H247442-22)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 144 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 91.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 15 @ 1' (H247442-23)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 768 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 85.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 16 @ 1' (H247442-24)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 496 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 91.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 17 @ 2.5' (H247442-25)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1760 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 91.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 18 @ 1' (H247442-26)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 448 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 91.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 19 @ 1' (H247442-27)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 176 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 81.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 72.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 20 @ 1' (H247442-28)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 96.0 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 89.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 21 @ 2.5' (H247442-29)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 512 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 92.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
ANDREW PARKER
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 12/09/2024
Reported: 12/13/2024
Project Name: SHAHARA STATE UNIT #008 INJ
Project Number: 24E-04470
Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS24 - 22 @ 2' (H247442-30)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 192 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 91.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 23 @ 1' (H247442-31)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 48.0 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 81.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 24 @ 1' (H247442-32)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 960 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 79.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 25 @ 1' (H247442-33)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 592 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 91.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 26 @ 1' (H247442-34)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 592 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 89.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 27 @ 2' (H247442-35)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 448 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 89.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 28 @ 2' (H247442-36)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 368 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 90.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.3 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 29 @ 2' (H247442-37)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1300 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/10/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/10/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/10/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 80.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 72.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 30 @ 2' (H247442-38)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 688 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/10/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/10/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/10/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 82.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 31 @ 2.5' (H247442-39)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1170 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/10/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/10/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/10/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 91.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
ANDREW PARKER
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 12/09/2024
Reported: 12/13/2024
Project Name: SHAHARA STATE UNIT #008 INJ
Project Number: 24E-04470
Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS24 - 32 @ 2' (H247442-40)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.17 | 109 | 2.00 | 8.10 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.24 | 112 | 2.00 | 5.35 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.19 | 110 | 2.00 | 4.29 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.91 | 115 | 6.00 | 4.19 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 704 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/10/2024 | ND | 239 | 120 | 200 | 1.47 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/10/2024 | ND | 221 | 110 | 200 | 1.87 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/10/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 93.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 33 @ 3' (H247442-41)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 992 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 98.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
ANDREW PARKER
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 12/09/2024
Reported: 12/13/2024
Project Name: SHAHARA STATE UNIT #008 INJ
Project Number: 24E-04470
Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS24 - 34 @ 3' (H247442-42)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEx | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 4360 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 35 @ 3' (H247442-43)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 720 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | 12.6 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 36 @ 4.2' (H247442-44)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1010 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 37 @ 4.2' (H247442-45)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 288 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 38 @ 4.2' (H247442-46)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 2000 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 39 @ 4.2' (H247442-47)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 2560 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 40 @ 4.2' (H247442-48)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 3920 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 97.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 41 @ 4.2' (H247442-49)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2760 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 42 @ 4.2' (H247442-50)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1840 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
ANDREW PARKER
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 12/09/2024
Reported: 12/13/2024
Project Name: SHAHARA STATE UNIT #008 INJ
Project Number: 24E-04470
Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS24 - 43 @ 4.2' (H247442-51)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1570 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 84.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.8 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 44 @ 4.2' (H247442-52)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 6400 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 94.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 45 @ 4.2' (H247442-53)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 4160 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
ANDREW PARKER
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 12/09/2024
Reported: 12/13/2024
Project Name: SHAHARA STATE UNIT #008 INJ
Project Number: 24E-04470
Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS24 - 46 @ 4.2' (H247442-54)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: CT | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1880 | 16.0 | 12/10/2024 | ND | 432 | 108 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 47 @ 4.2' (H247442-55)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 176 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 48 @ 4.2' (H247442-56)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 816 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
ANDREW PARKER
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 12/09/2024
Reported: 12/13/2024
Project Name: SHAHARA STATE UNIT #008 INJ
Project Number: 24E-04470
Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS24 - 49 @ 4.2' (H247442-57)

| BTEx 8021B | | | mg/kg | | Analyzed By: JH | | | | |
|----------------|--------|-----------------|------------|--------------|-----------------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 160 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 50 @ 4.2' (H247442-58)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEx | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: KV | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 48.0 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 51 @ 4.2' (H247442-59)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 208 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/10/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/10/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/10/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 52 @ 4.2' (H247442-60)

| BTEx 8021B | | | mg/kg | | Analyzed By: JH | | | | |
|----------------|--------|-----------------|------------|--------------|-----------------|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.20 | 110 | 2.00 | 1.60 | |
| Toluene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.25 | 112 | 2.00 | 0.272 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/10/2024 | ND | 2.18 | 109 | 2.00 | 0.397 | |
| Total Xylenes* | <0.150 | 0.150 | 12/10/2024 | ND | 6.87 | 114 | 6.00 | 0.0854 | |
| Total BTEX | <0.300 | 0.300 | 12/10/2024 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 32.0 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/10/2024 | ND | 198 | 99.1 | 200 | 2.22 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/10/2024 | ND | 196 | 97.9 | 200 | 2.09 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/10/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 53 @ 4.2' (H247442-61)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 1.97 | 98.7 | 2.00 | 5.84 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.01 | 101 | 2.00 | 4.32 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.04 | 102 | 2.00 | 3.64 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.11 | 102 | 6.00 | 3.27 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 688 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 232 | 116 | 200 | 2.96 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 206 | 103 | 200 | 3.26 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 86.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 75.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
ANDREW PARKER
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 12/09/2024
Reported: 12/13/2024
Project Name: SHAHARA STATE UNIT #008 INJ
Project Number: 24E-04470
Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS24 - 54 @ 4.2' (H247442-62)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 1.97 | 98.7 | 2.00 | 5.84 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.01 | 101 | 2.00 | 4.32 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.04 | 102 | 2.00 | 3.64 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.11 | 102 | 6.00 | 3.27 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 96.0 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 232 | 116 | 200 | 2.96 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 206 | 103 | 200 | 3.26 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 89.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
ANDREW PARKER
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 12/09/2024
Reported: 12/13/2024
Project Name: SHAHARA STATE UNIT #008 INJ
Project Number: 24E-04470
Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS24 - 55 @ 4.2' (H247442-63)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 1.97 | 98.7 | 2.00 | 5.84 | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.01 | 101 | 2.00 | 4.32 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.04 | 102 | 2.00 | 3.64 | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.11 | 102 | 6.00 | 3.27 | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 144 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 232 | 116 | 200 | 2.96 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 206 | 103 | 200 | 3.26 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 90.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 ANDREW PARKER
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 12/09/2024
 Reported: 12/13/2024
 Project Name: SHAHARA STATE UNIT #008 INJ
 Project Number: 24E-04470
 Project Location: J & J INVESTMENTS

Sampling Date: 12/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS24 - 56 @ 4.2' (H247442-64)

| BTEx 8021B | | mg/kg | | Analyzed By: JH | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/09/2024 | ND | 1.97 | 98.7 | 2.00 | 5.84 | | |
| Toluene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.01 | 101 | 2.00 | 4.32 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/09/2024 | ND | 2.04 | 102 | 2.00 | 3.64 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/09/2024 | ND | 6.11 | 102 | 6.00 | 3.27 | | |
| Total BTEX | <0.300 | 0.300 | 12/09/2024 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: KV | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1250 | 16.0 | 12/10/2024 | ND | 448 | 112 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/09/2024 | ND | 232 | 116 | 200 | 2.96 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/09/2024 | ND | 206 | 103 | 200 | 3.26 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/09/2024 | ND | | | | | |

Surrogate: 1-Chlorooctane 85.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

| | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------|
| Company Name: VerTex (Bill to JJJ Investments) Project Manager: Andrew Parker Address: 3101 Boyd Dr. City: Carlsbad State: NM Zip: 88220 Phone #: 575-689-7007 Fax #: Project #: 24E-04470 Project Owner: Josie Ciempa Project Name: Shahara State Unit #008 INS Project Location: Sample Name: Meghan Veliz FOR LAB USE ONLY | | BILL TO P.O. #: Company: JJJ Investments Attn: Josie Ciempa Address: City: State: Zip: Phone #: Fax #: | | ANALYSIS REQUEST | |
| Lab I.D. Sample I.D. | BASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the service. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. | (G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER: | MATRIX PRESERV SAMPLING | DATE TIME | BTX (8021) TPH: 8015D (GRO/DRO/MRO) Chloride |
| | | | | | |
| 1 UB24-01 @ 0-1' 2 UB24-02 @ 0-1' 3 UB24-03 @ 0-2' 4 UB24-03 @ 2-4' 5 UB24-04 @ 0-2' 6 UB24-04 @ 2-4' 7 UB24-05 @ 0-2' 8 UB24-05 @ 2-4' 9 BS24-01 @ 1' 10 BS24-02 @ 1' | | | | | |
| Delivered By: (Circle One) Sampler - UPS - Bus - Other: | Observed Temp. °C 3.9 Corrected Temp. °C 3.3 | Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Bacteria (only) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Turnaround Time: Standard Rush <input checked="" type="checkbox"/> | Thermometer ID #140 Correction Factor -0.6°C | Corrected Temp. °C |
| Received By: [Signature] Date: 12-9-24 Time: 11:30 | Received By: [Signature] Date: Time: | Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: All Results are emailed. Please provide Email address: REMARKS: Josie Ciempa - in jinvestments@putn.net a Parker@vertexresource.com, mveliz@vertexresource.com NO Rush yet - 12/9/24 | | | |

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| | | | | | | | | | | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------|--|--|--|
| Company Name: Vertex Bill to JJJ Investments | | | | | | | BILL TO | | P.O. #: | | ANALYSIS REQUEST | | | | | |
| Project Manager: Andrew Parker | | | | | | | | | Company: JJJ Investments | | | | | | | |
| Address: 310 Boyd Dr. | | | | | | | | | Attn: Josie Ciempa | | | | | | | |
| City: Carlsbad | | | | | | | | | Address: | | | | | | | |
| Phone #: 575-689-7007 | | | | | | | State: NM | | Zip: 88220 | | | | | | | |
| Project #: 24E-04470 | | | | | | | Fax #: | | City: | | | | | | | |
| Project Owner: Josie Ciempa | | | | | | | State: | | Zip: | | | | | | | |
| Project Location: Shahara State Unit #008 INS | | | | | | | Phone #: | | Fax #: | | | | | | | |
| Sampler Name: Megan Veliz | | | | | | | FOR LAB USE ONLY | | | | | | | | | |
| Lab I.D. Sample I.D. | | | | | | | (G)RAB OR (C)OMP. | | MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : | | PRESERV ACID/BASE: ICE / COOL OTHER : | | SAMPLING DATE TIME | | | |
| | | | | | | | # CONTAINERS | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> H24-7442 BS24-03 @ 1' </div> <div style="display: flex; justify-content: space-between;"> BS24-04 @ 2' </div> <div style="display: flex; justify-content: space-between;"> BS24-05 @ 1' </div> <div style="display: flex; justify-content: space-between;"> BS24-06 @ 1' </div> <div style="display: flex; justify-content: space-between;"> BS24-07 @ 1' </div> <div style="display: flex; justify-content: space-between;"> BS24-08 @ 1' </div> <div style="display: flex; justify-content: space-between;"> BS24-09 @ 1' </div> <div style="display: flex; justify-content: space-between;"> BS24-10 @ 1' </div> <div style="display: flex; justify-content: space-between;"> BS24-11 @ 1' </div> <div style="display: flex; justify-content: space-between;"> BS24-12 @ 1' </div> | | | | | | | | | | | | | | | | |
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| Disinquinshed By: <i>[Signature]</i> Date: 12-24-24 Time: 11:30 Received By: <i>[Signature]</i> | | | | | | | | | | | | | | | | |
| Delivered By: (Circle One) Sample - UPS - Bus - Other: _____ Observed Temp. °C: 39 Corrected Temp. °C: 33 Turnaround Time: Standard Thermometer ID #140 Correction Factor -0.6°C | | | | | | | Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____ REMARKS: Josie Ciempa - jciempa@pvtn.net aparker@vertexresource.com, mveliz@vertexresource.com | | Sample Condition Cool Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Checked BY: (Initials) <i>[Signature]</i> | | Corrected Temp. °C: 33 Observed Temp. °C: 39 Backlog: No Rush Sample Condition Bacteria (only) Sample Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Observed Temp. °C: _____ Corrected Temp. °C: _____ | | | | | |

| Company Name: | | P.O. #: | | BILL TO | | ANALYSIS REQUEST | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------|--|---------|--|------------------|--|
| Vertex (Bill to J & J Investments) | | | | | | | |
| Project Manager: Andreu Parker | | | | | | | |
| Address: 3101 Boyd Dr. | | | | | | | |
| City: Carlsbad | | | | | | | |
| Phone #: 575-689-7007 | | | | | | | |
| Fax #: 88220 | | | | | | | |
| State: NM | | | | | | | |
| Zip: 88220 | | | | | | | |
| Project #: 24E-04470 | | | | | | | |
| Project Owner: Josie Ciempa | | | | | | | |
| Project Name: Shahara State Unit #008 INV | | | | | | | |
| Project Location: | | | | | | | |
| Sampler Name: Meghan Veliz | | | | | | | |
| FOR LAB USE ONLY | | | | | | | |
| Lab I.D. | | | | | | | |
| Sample I.D. | | | | | | | |
| 31 BS24-13 @ 1' | | | | | | | |
| 32 BS24-14 @ 1' | | | | | | | |
| 33 BS24-15 @ 1' | | | | | | | |
| 34 BS24-16 @ 1' | | | | | | | |
| 35 BS24-17 @ 2.5' | | | | | | | |
| 36 BS24-18 @ 1' | | | | | | | |
| 37 BS24-19 @ 1' | | | | | | | |
| 38 BS24-20 @ 1' | | | | | | | |
| 39 BS24-21 @ 2.5' | | | | | | | |
| 40 BS24-22 @ 2.5' | | | | | | | |
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| Disinquinshed By: Meghan Veliz | | | | | | | |
| Date: 12-9-24 | | | | | | | |
| Time: 11:30 | | | | | | | |
| Date: 11/30 | | | | | | | |
| Time: 11:30 | | | | | | | |
| Received By: Josie Ciempa | | | | | | | |
| Date: 11/30 | | | | | | | |
| Time: 11:30 | | | | | | | |
| Observed Temp. °C 3.9 | | | | | | | |
| Corrected Temp. °C 3.3 | | | | | | | |
| Sample Condition | | | | | | | |
| Cool Intact | | | | | | | |
| Yes Yes | | | | | | | |
| No No | | | | | | | |
| CHECKED BY: (Initials) | | | | | | | |
| J.C. | | | | | | | |
| Turnaround Time: Standard | | | | | | | |
| Thermometer ID #140 | | | | | | | |
| Correction Factor -0.5°C | | | | | | | |
| Bacterial (only) Sample Condition | | | | | | | |
| Cool Intact | | | | | | | |
| Yes Yes | | | | | | | |
| No No | | | | | | | |
| Corrected Temp. °C | | | | | | | |
| 3.9 | | | | | | | |
| Remarks: Josie Ciempa-jciempas@putn.net | | | | | | | |
| All Results are emailed. Please provide Email address: aparker@vertexresource.com, mveliz@vertexresource.com | | | | | | | |
| Verbal Result: Yes No Add'l Phone #: | | | | | | | |
| All Results are emailed. Please provide Email address: aparker@vertexresource.com, mveliz@vertexresource.com | | | | | | | |
| Remarks: Josie Ciempa-jciempas@putn.net | | | | | | | |
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| Remarks: Josie Ciempa-jciempas@putn.net | | | | | | | |
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| Verbal Result: Yes No Add'l Phone #: | | | | | | | |
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| Verbal Result: Yes No Add'l Phone #: | | | | | | | |
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| Remarks: Josie Ciempa-jciempas@putn.net | | | | | | | |
| All Results are emailed. Please provide Email address: aparker@vertexresource.com, mveliz@vertexresource.com | | | | | | | |
| Verbal Result: Yes No Add'l Phone #: | | | | | | | |
| All Results are emailed. Please provide Email address: aparker@vertexresource.com, mveliz@vertexresource.com | | | | | | | |
| Remarks: Josie Ciempa-jciempas@putn.net | | | | | | | |
| All Results are emailed. Please provide Email address: aparker@vertexresource.com, mveliz@vertexresource.com | | | | | | | |
| Verbal Result: Yes No Add'l Phone #: | | | | | | | |
| All Results are emailed. Please provide Email address: | | | | | | | |



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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

| | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|-----------------------------------------------------|
| Company Name: Vertex/Bill to J.J. Investments Project Manager: Andrew Parker Address: 3101 Boyd Dr. City: Carlsbad State: NM Zip: 88220 Phone #: 575-689-7007 Fax #: Project #: 24E-04470 Project Owner: Josie Ciempa Project Name: Shabara State Unit #008 INS Project Location: Sampler Name: Meghan Veliz FOR LAB USE ONLY | | BILL TO P.O. #: Company: J.J. Investments Attn: Josie Ciempa Address: City: State: Zip: Phone #: Fax #: | | ANALYSIS REQUEST | |
| Lab I.D. H2474.42 41 42 43 44 45 46 47 48 49 50 | Sample I.D. BS24-33 BS24-34 BS24-35 BS24-36 BS24-37 BS24-38 BS24-39 BS24-40 BS24-41 BS24-42 | (G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER: | MATRIX PRESERV SAMPLING | DATE TIME | BTEX (8021) TPH: 8015D (GRO/DRO/MRO) Chloride |
| 12-4-24 2:50pm 12-4-24 2:57pm 12-4-24 3:05pm 12-5-24 9:29am 12-5-24 9:34am 12-5-24 9:39am 12-5-24 9:43am 12-5-24 9:48am 12-5-24 9:55am 12-5-24 9:59am | | | | | |

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Relinquished By: [Signature] **Date:** 12-4-24 **Received By:** [Signature] **Date:** 12-4-24

Relinquished By: [Signature] **Date:** 12-4-24 **Received By:** [Signature] **Date:** 12-4-24

Delivered By: (Circle One) **Observed Temp. °C:** 3.9 **Sample Condition:** ☒ Intact ☐ Cool ☐ Yes ☐ No **CHECKED BY:** [Signature] **INITIALS:**

Sampler - UPS - Bus - Other: **Corrected Temp. °C:** 3.3 **Thermometer ID #140** **Correction Factor -0.6°C** **Standard:** ☒ Rush ☐ Standard **Bacteria (only) Sample Condition:** ☒ Intact ☐ Cool ☐ Yes ☐ No **Corrected Temp. °C:**

Remarks: Josie Ciempa - jciempa@qnet.net
All Results are emailed. Please provide Email address: Parker@vertexresource.com, mveliz@vertexresource.com



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|--|----------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|-------------------|--|-------------------|--|----------------------------------|--|-------------------|--|--------------------|--|---------------------|--|--------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------|--|------------|--|
| Company Name: Vortex/611 to JTS Investments | | P.O. #: | | BILL TO | | ANALYSIS REQUEST | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Manager: Andrew Parker | | Company: JTS Investments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Address: 3101 Boyd Dr. | | Attn: Josie Ciempa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| City: Carlsbad | | Address: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| State: NM Zip: 88220 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phone #: 575-689-7007 Fax #: | | City: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project #: 24E-04470 Project Owner: Josie Ciempa | | State: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Name: Shahara State Unit #008 ENV | | Zip: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Location: | | Phone #: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampler Name: Stephen Veliz | | Fax #: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FOR LAB USE ONLY | | MATRIX | | PRESERV | | SAMPLING | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lab I.D. | | Sample I.D. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H24-7442 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 51 BS24-43 @ 4.2' | | (G)RAB OR (C)OMP. | | # CONTAINERS | | GROUNDWATER | | WASTEWATER | | SOIL | | OIL | | SLUDGE | | OTHER : | | ACID/BASE: | | ICE / COOL | | OTHER : | | DATE | | TIME | | X BTEX (8021) | | X TPH: 8015D (GRO/DRO/MRO) | | X Chloride | |
| 52 BS24-44 @ 4.2' | | X | | 1 | | | | | | | | | | | | | | | | | | | | 12-5-24 10:04am | | | | | | | | | |
| 53 BS24-45 @ 4.2' | | | | | | | | | | | | | | | | | | | | | | | | 12-5-24 10:08am | | | | | | | | | |
| 54 BS24-46 @ 4.2' | | | | | | | | | | | | | | | | | | | | | | | | 12-5-24 10:12am | | | | | | | | | |
| 55 BS24-47 @ 4.2' | | | | | | | | | | | | | | | | | | | | | | | | 12-5-24 10:16am | | | | | | | | | |
| 56 BS24-48 @ 4.2' | | | | | | | | | | | | | | | | | | | | | | | | 12-5-24 10:29am | | | | | | | | | |
| 57 BS24-49 @ 4.2' | | | | | | | | | | | | | | | | | | | | | | | | 12-5-24 10:30am | | | | | | | | | |
| 58 BS24-50 @ 4.2' | | | | | | | | | | | | | | | | | | | | | | | | 12-5-24 10:40am | | | | | | | | | |
| 59 BS24-51 @ 4.2' | | | | | | | | | | | | | | | | | | | | | | | | 12-5-24 10:44am | | | | | | | | | |
| 60 BS24-52 @ 4.2' | | | | | | | | | | | | | | | | | | | | | | | | 12-5-24 10:49am | | | | | | | | | |
| PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits, incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. | | Relinquished By: Stephen Veliz | | Date: 12-4-24 | | Received By: Josie Ciempa | | Date: 12-4-24 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | | |
| Relinquished By: Stephen Veliz | | Date: 12-4-24 | | Received By: Josie Ciempa | | Date: 12-4-24 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | Time: 1:30 | | | |
| Delivered By: (Circle One) | | Observed Temp. °C | | Corrected Temp. °C | | Sample Condition | | CHECKED BY: (Initials) | | Turnaround Time: | | Standard | | Bacteria (only) Sample Condition | | Observed Temp. °C | | Corrected Temp. °C | | Thermometer ID #140 | | Correction Factor -0.5°C | | Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | | Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | | Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | | Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | | | |
| Sampler - UPS - Bus - Other: | | 3.9 | | 3.3 | | Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | | JSC | | 12-4-24 | | Standard | | Bacteria (only) Sample Condition | | Observed Temp. °C | | Corrected Temp. °C | | #140 | | -0.5°C | | Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | | Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | | Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | | Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | | | |
| FORM 900-R-3-09-07-24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

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

CONDITIONS

Action 415899

CONDITIONS

| | |
|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Operator: J & J Investments, LLC 132257 Lovington Hwy Loco Hills, NM 88255 | OGRID: 331241 |
| | Action Number: 415899 |
| | Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| nvelez | Variance request to 19.15.29.13D (1) NMAC limiting the reclamation standards to 2 feet rather than 4 based on physical conditions is approved. Attachment was provided. | 12/30/2024 |