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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

| | |
|---|---|
| Incident ID | nAPP2102628107 |
| District RP | |
| Facility ID | |
| Application ID | |

# Release Notification

## Responsible Party

| | |
|---|---|
| Responsible Party: Centennial Resource Production, Inc | OGRID: 372165 |
| Contact Name: Jamon Hohensee | Contact Telephone: 432-241-4283 |
| Contact email: jamon.hohensee@cdevinc.com | Incident # nAPP2102628107 |
| Contact mailing address: 500 W. Illinois Ave, Suite 500, Midland Texas 79705 | |

## Location of Release Source

Latitude 32.45868 Longitude -103.51118
*(NAD 83 in decimal degrees to 5 decimal places)*

| | |
|---|---|
| Site Name: Juice Bud State Com 502H | Site Type: Production Facility |
| Date Release Discovered: 1/22/21 | API# *(if applicable)* |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| N | 19 | 21S | 34E | Lea |

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

## Nature and Volume of Release

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

| | | |
|---|---|---|
| ☒ Crude Oil | Volume Released (bbls) 3 | Volume Recovered (bbls) |
| ☒ Produced Water | Volume Released (bbls) 3 | Volume Recovered (bbls) |
| | Is the concentration of dissolved chloride in the produced water >10,000 mg/l? | ☐ Yes ☐ No |
| ☐ Condensate | Volume Released (bbls) | Volume Recovered (bbls) |
| ☐ Natural Gas | Volume Released (Mcf) | Volume Recovered (Mcf) |
| ☐ Other (describe) | Volume/Weight Released (provide units) | Volume/Weight Recovered (provide units) |

Cause of Release
2" nipple behind the union on the well head washed out causing fluids to be released to the pad area adjacent to the well head.

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Page 2

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2102628107 |
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| Application ID | |

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

## Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

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

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

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

Printed Name: Jamon Hohensee  Title: Sr. Environmental Analyst

Signature: _____  Date: 2/11/21

email: jamon.hohensee@cdevinc.com  Telephone: 432-241-4283

**OCD Only**

Received by: _____  Date: _____

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Page 3

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2102628107 |
| District RP | |
| Facility ID | |
| Application ID | |

# Site Assessment/Characterization

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

No usable data

| | |
|---|---|
| What is the shallowest depth to groundwater beneath the area affected by the release? | ≤ 50 (ft bgs) |
| Did this release impact groundwater or surface water? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? | ☐ Yes ☒ No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of a wetland? | ☐ Yes ☒ No |
| Are the lateral extents of the release overlying a subsurface mine? | ☐ Yes ☒ No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | ☐ Yes ☒ No |
| Are the lateral extents of the release within a 100-year floodplain? | ☐ Yes ☒ No |
| Did the release impact areas **not** on an exploration, development, production, or storage site? | ☐ Yes ☒ No |

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

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

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

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

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Page 4

State of New Mexico
Oil Conservation Division

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

Printed Name: Jamon Hohensee Title: Sr. Environmental Analyst

Signature: Jam H. Date: 8-10-21

email: jamon.hohensee@cdevinc.com Telephone: 432-241-4283

**OCD Only**

Received by: Date:

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State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2102628107 |
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| Facility ID | |
| Application ID | |

# Remediation Plan

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

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

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

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

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

Printed Name: Jamon Hohenseé  Title: Sr. Environmental Analyst

Signature: [signature]  Date: 8-10-21

email: jamon.hohensee@cdevinc.com  Telephone: 432-241-4783

**OCD Only**

Received by: _____  Date: _____

- [ ] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: _____  Date: _____

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Page 6

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2102628107 |
| District RP | |
| Facility ID | |
| Application ID | |

# Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: Jamon Hohensee Title: Sr. Environmental Analyst

Signature: JH Date: 8-10-21

email: jamon.hohensee@chevron.com Telephone: 432-241-4283

**OCD Only**

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

*Environmental & Safety Solutions, Inc.*

# CLOSURE REQUEST AND REMEDIATION SUMMARY REPORT

**Centennial Resource Development, Inc.**
**Juice Bud State COM 502H (Wellhead)**
**Lea County, New Mexico**
**Unit Letter "N", Section 19, Township 21 South, Range 34 East**
**Latitude 32.45868º North, Longitude 103.51118º West**
**NMOCD Reference # nAPP2102628107**

Prepared For:

**Centennial Resource Development, Inc.**
500 W. Illinois Avenue Suite 500
Midland, TX 79701

Prepared By:

**Etech Environmental & Safety Solutions, Inc.**
P.O. Box 62228
Midland, Texas 79711

**August 2021**

Wesley A. Desilets
Project Manager

Matthew Green, P.G.
Senior Project Manager

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## FIGURES



## TABLES



## APPENDICES

## INTRODUCTION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Centennial Resource Development, Inc. (Centennial), has prepared this Closure Request and Remediation Summary Report for the Release Site known as Juice Bud State COM 502H (Wellhead). The legal description of the Release Site is Unit Letter "N", Section 19, Township 21 South, Range 34 East, in Lea County, New Mexico. The subject property is owned by The New Mexico State Land Office (NMSLO). The Release Site GPS coordinates are 32.45868º North and 103.51118º West. Please reference Figure 1 for the Site Location Map and Figure 2 for the Site Details and Sample Location Map.

On January 22, 2021, Centennial discovered that a release had occurred at the Juice Bud State COM 502H (Wellhead) Release Site. A two (2) inch nipple on the wellhead failed, resulting in the release of approximately three (3) barrels of crude oil and three (3) barrels of produced water with zero (0) barrels of crude oil and zero (0) barrels of produced water recovered, resulting in a net loss of approximately three (3) barrels of crude oil and three (3) barrels of produced water. On February 11, 2021, Centennial filed a *Release Notification and Corrective Action Form* (Form C-141) with the New Mexico Oil Conservation Division (NMOCD) and NMSLO documenting the release. The Form C-141 is provided as Appendix C. Photographic documentation for the site are provided as Appendix A.

## NMOCD SITE CLASSIFICATION

A search of the groundwater database maintained by United States Geological Survey (USGS) did not identify any registered water wells within a quarter (1/4) mile of the Juice Bud State COM 502H (Wellhead) Release Site. A further search of the USGS database identified the closest registered water well is USGS Well #: 322641103311201 located approximately one (1) mile southwest of the Release Site. The average depth to groundwater for USGS Well #: 322641103311201 should be encountered at approximately fifty-five (55) feet below ground surface (bgs). No water wells were observed within one thousand (1,000) feet of the Release Site. No surface water was observed within one thousand (1,000) feet of the release. Based on the NMOCD site classification system, the Juice Bud State COM 502H (Wellhead) Release Site soil remediation levels are as follows:

- Benzene – 10 mg/Kg (ppm)
- BTEX – 50 mg/Kg (ppm)
- TPH – 100 mg/Kg (ppm)
- Chloride – 600 mg/Kg (ppm)

## SUMMARY OF SOIL REMEDIATION ACTIVITIES

From February 24 through March 2, 2021, Etech commenced excavation activities at the Release Site utilizing a backhoe and manual means. Excavated soil was stockpiled on site awaiting disposal. Excavation activities were conducted in a manner that protected the integrity of the production equipment. Etech hand spotted around all surface equipment and excavated by hand all impacted material within two (2) feet of any production equipment. Etech, on behalf of Centennial, collected three (3) composite confirmation soil samples (BH1 @ 18", BH2 @ 18", and BH3 @ 18") from the base of the excavated area, and four (4) composite horizontal confirmation soil samples (NWW, NEW, SWW, and SEW) from the sidewalls of the excavated area. The soil samples were submitted to Permian Basin Environmental Lab, LP. (PBELAB) in Midland, Texas and analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA Method SW 846-8021B, Total Petroleum Hydrocarbons (TPH) using EPA Method SW 846-8015M, and chloride using EPA Method E 300.0. A review of laboratory analytical results indicated additional excavation activities were necessary due to elevated TPH concentrations for the composite confirmation soil samples (BH1 @ 18", BH2 @ 18", and BH3 @ 18") and for the composite horizontal confirmation soil sample (NWW). Please reference Figure 2 for site details and soil sample locations.

On March 30, 2021, following further excavation activities, three (3) composite confirmation soil samples (BH-1A @ 24", BH-2A @ 18", and BH-3A @ 24") were collected from the base of the further excavated area, and one (1) composite horizontal confirmation soil sample (NWW-A @ 12") was collected from the sidewall of the further excavated area. The samples were submitted to PBELAB for TPH analysis. A review of laboratory analytical results indicated all collected soil samples were below applicable NMOCD limits. Please reference Figure 2 for site details and soil sampling locations.

On May 10, 2021, three (3) additional composite confirmation soil samples were collected from the base of the excavation (Comp-1, Comp-2, and Comp-3), and two (2) composite horizontal confirmation soil samples (WW-1 @ 1' and WW-2 @ 1') were collected from sidewalls of the excavation as part of a landowner confirmation sampling event. The samples were submitted to PBELAB for BTEX, TPH, and chloride analysis. A review of laboratory analytical results indicated that additional excavation activities were necessary due to elevated TPH concentrations for the composite confirmation soil sample (Comp-2) and for the composite horizontal confirmation soil sample (WW-2 @ 1'). The landowner's analytical results indicated that additional excavation activities were also necessary due to elevated TPH concentrations for the composite horizontal confirmation soil sample (WW-1 @ 1'). Please reference Figure 2 for site details and soil sampling locations.

On May 21, 2021, following further excavation activities, one (1) composite confirmation soil sample (Comp-2) was collected from the base of the further excavated area, and two (2) composite horizontal confirmation soil sample (WW-1 and WW-2) were collected from the sidewall of the further excavated area. The samples were submitted to PBELAB for TPH analysis. A review of laboratory analytical results indicated all collected soil samples were below applicable NMOCD limits. Please reference Figure 2 for site details and soil sampling locations.

Table 1 summarizes the Concentrations of Benzene, BTEX, TPH, and Chlorides in Soil. Analytical reports are provided as Appendix B.

## SOIL DISPOSAL AND BACKFILL ACTIVIES

From June 23 through June 25, 2021, Etech transported the impacted stockpiled soil to the Sundance disposal facility in Lea County, NM. The excavated area was backfilled with non-impacted like soil from a landowner approved source and the site was contoured to fit the surrounding area.

## SITE CLOSURE REQUEST

Based on the analytical results, Centennial requests NMOCD grant Site Closure Status to the Juice Bud State COM 502H (Wellhead) Release Site, incident number nAPP2102628107.

## LIMITATIONS

Etech has prepared this Closure Request and Remediation Summary Report to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Etech has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report. This report has been prepared for the benefit of Centennial Resource Development, Inc. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Etech and/or Centennial Resource Development, Inc.

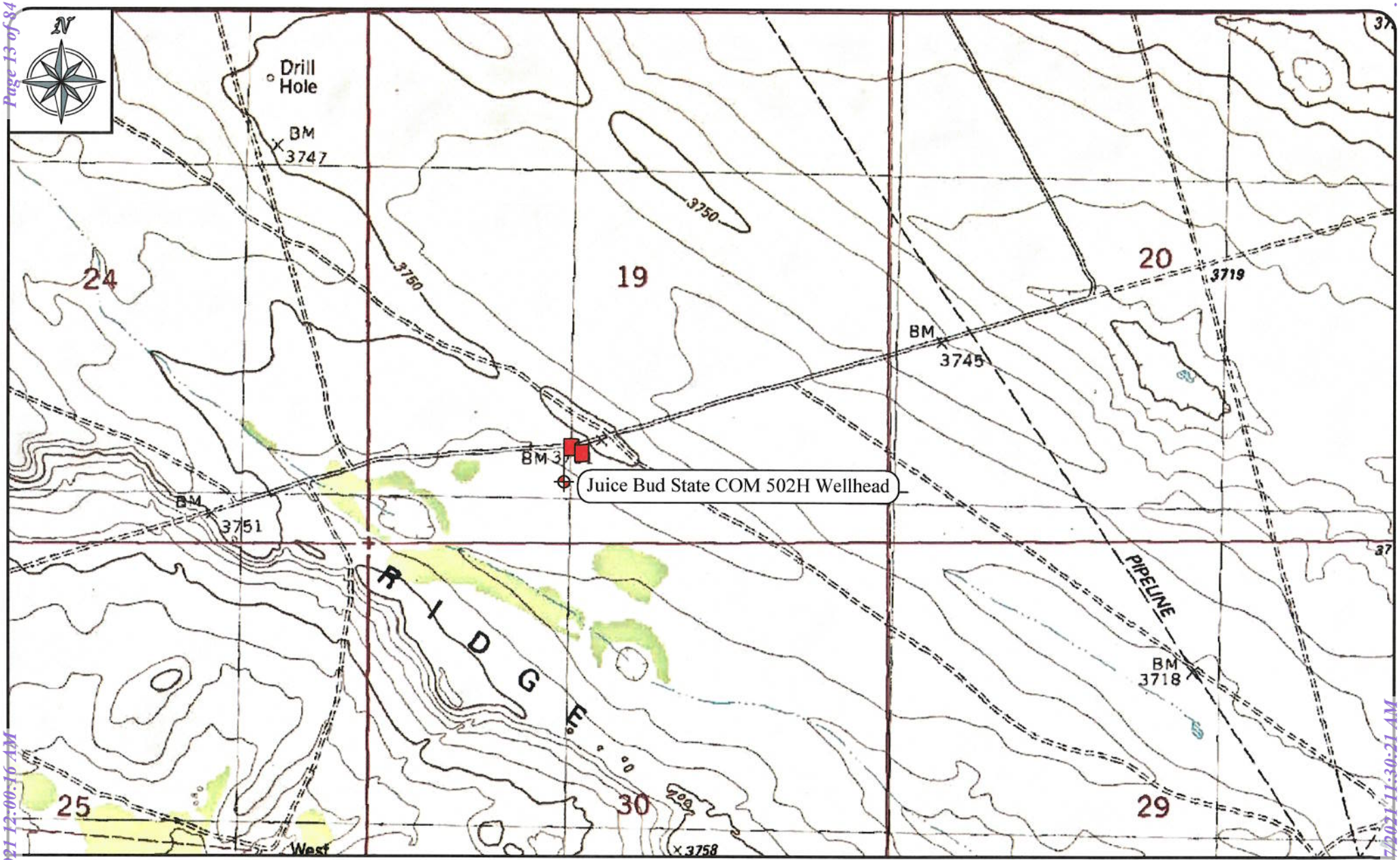
**DISTRIBUTION**

Copy 1: New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1624 N. French Drive
Hobbs, New Mexico 88210

Copy 2: Ryan Mann
New Mexico State Land Office
Field Operations Division
2827 N. Dal Paso Street, Suite 117
Hobbs, New Mexico 88240

Copy 2: Jamon Hohensee
Centennial Resource Development, Inc.
500 W. Illinois Avenue, Suite 500
Midland, Texas 79701

Copy 3: Etech Environmental & Safety Solutions, Inc.
P.O. Box 62228
Midland, Texas 79711




Site - Juice Bud State COM 502H Wellhead
Site Location Map
Centennial Resource Development, Inc.
Lea County, NM
N 32.45868°, W 103.51118°
July 2021

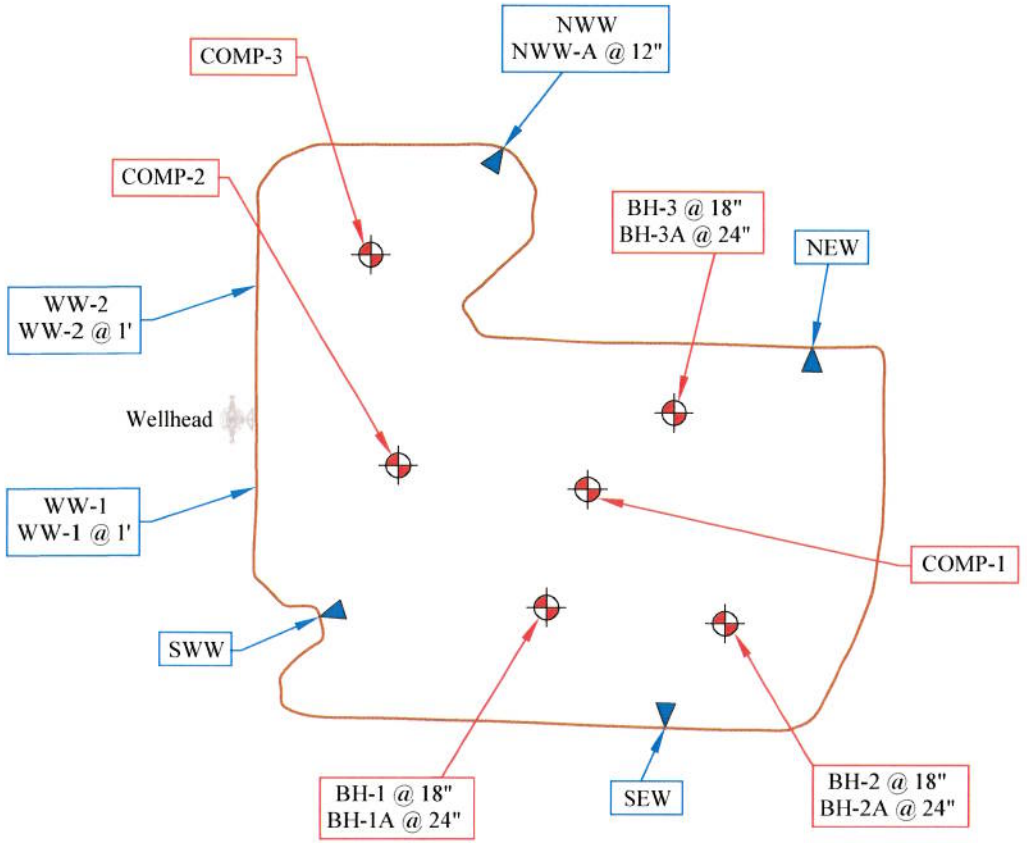
Legend

= Site Location

eTECH Environmental & Safety Solutions, Inc.

CDEVID No.: 38806

Figure 1




Site - Juice Bud State COM 502H Wellhead
Site Details and Sample Location Map
Centennial Resource Development, Inc.
Lea County, NM
N 32.45868°, W 103.51118°
July 2021

Legend

= Bottom Hole Sample Points

= Side Wall Sample Points

Excavation Perimeter

Notes:
- All samples are 5 point composites
- All samples points are approximate

0 25 50
Feet

eTECH Environmental & Safety Solutions, Inc.

CDEVID No.: 38806

Figure 2

# TABLE 1

**CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL**

## CENTENNIAL RESOURCE DEVELOPMENT, INC.

**JUICE BUD STATE COM 502H WELLHEAD RELEASE**

**LEA COUNTY, NEW MEXICO**

*All concentrations are reported in mg/Kg*

| SAMPLE LOCATION | SAMPLE DATE | METHODS: SW 846-8021B | | | | | | METHOD: SW 8015M | | | | | E 300.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BENZENE | TOLUENE | ETHYL-BENZENE | m, p - XYLENES | o - XYLENE | TOTAL XYLENES | TOTAL BTEX | TPH GRO $C_6$-$C_{12}$ | TPH DRO $C_{12}$-$C_{28}$ | TPH ORO $C_{28}$-$C_{35}$ | TOTAL TPH $C_6$-$C_{35}$ | CHLORIDE |
| Limits | | 10 mg/Kg | | | | | | 50 mg/Kg | | | | 100 mg/Kg | 600 mg/Kg |
| **Bottom Hole Sample Results** | | | | | | | | | | | | | |
| **BH1 @ 18"** | 3/2/2021 | 0.00428 | 0.0155 | 0.00670 | 0.0369 | 0.0122 | 0.0491 | 0.07558 | 150 | 2,260 | 380 | **2,790** | 96.9 |
| **BH-1A @ 24"** | 3/30/2021 | - | - | - | - | - | - | - | ND | 50.9 | 26.4 | 77.3 | - |
| **BH2 @ 18"** | 3/2/2021 | 0.00143 | 0.00910 | 0.00164 | 0.00495 | 0.00107 | 0.00602 | 0.01819 | 30.5 | 959 | 185 | **1,174.5** | 127 |
| **BH-2A @ 24"** | 3/30/2021 | - | - | - | - | - | - | - | ND | ND | ND | ND | - |
| **BH3 @ 18"** | 3/2/2021 | 0.00183 | 0.0117 | 0.00238 | 0.00779 | 0.00306 | 0.01085 | 0.02676 | 33.9 | 1,150 | 185 | **1,368.9** | 67.1 |
| **BH-3A @ 24"** | 3/30/2021 | - | - | - | - | - | - | - | ND | ND | ND | ND | - |
| **Sidewall Sample Results** | | | | | | | | | | | | | |
| **NWW** | 3/2/2021 | ND | 0.00138 | ND | ND | ND | ND | 0.00138 | ND | 88.0 | 26.4 | **114.4** | 164 |
| **NWW-A @ 12"** | 3/30/2021 | - | - | - | - | - | - | - | ND | ND | ND | ND | - |
| **NEW** | 3/2/2021 | ND | 0.00128 | ND | ND | ND | ND | 0.00128 | ND | 72.6 | ND | 72.6 | 39.1 |
| **SWW** | 3/2/2021 | ND | 0.00179 | ND | ND | ND | ND | 0.00179 | ND | ND | ND | ND | 56.7 |
| **SEW** | 3/2/2021 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 107 |
| **Comp-1** | 5/10/2021 | ND | ND | ND | ND | ND | ND | ND | ND | 32.7 | ND | 32.7 | 85.9 |
| **Comp-2** | 5/10/2021 | ND | ND | ND | ND | ND | ND | ND | ND | 291 | 38.9 | **329.9** | 113 |
| **Comp-2** | 5/21/2021 | - | - | - | - | - | - | - | ND | 42.2 | ND | 42.2 | - |
| **Comp-3** | 5/10/2021 | ND | ND | ND | ND | ND | ND | ND | ND | 35.0 | ND | 35.0 | 55.6 |
| **WW-1 @ 1'** | 5/10/2021 | ND | ND | ND | ND | ND | ND | ND | ND | 51.8 | ND | 51.8 | 151 |
| **WW-1** | 5/21/2021 | - | - | - | - | - | - | - | ND | ND | ND | ND | - |
| **WW-2 @ 1'** | 5/10/2021 | ND | ND | ND | ND | ND | ND | ND | ND | 147 | ND | **147** | 437 |
| **WW-2** | 5/21/2021 | - | - | - | - | - | - | - | ND | ND | ND | ND | - |

**Bold and Yellow Highlighted indicates analyte above NMOCD regulatory limit**
**ND indicates analyte below laboratory method detection limit**

***Project Name:*** *Juice Bud State COM 502H Wellhead* ***Photographic Documentation***
***Project No:*** *13717*

| | |
|---|---|
| **Photo No**: **1.** |  |
| **Direction Taken**: Northwest | |
| **Description**: View of the release area. | |

| | |
|---|---|
| **Photo No**: **2.** |  |
| **Direction Taken**: Southeast | |
| **Description**: View of the release area. | |

***Project Name:*** *Juice Bud State COM 502H Wellhead* ***Photographic Documentation***
***Project No:*** *13717*

| | |
|---|---|
| **Photo No**: **3.** |  |
| **Direction Taken**: Northwest | |
| **Description**: View of the excavated area. | |

| | |
|---|---|
| **Photo No**: **4.** |  |
| **Direction Taken**: Southeast | |
| **Description**: View of the excavated area. | |

***Project Name:*** *Juice Bud State COM 502H Wellhead* ***Photographic Documentation***
***Project No:*** *13717*

| | |
|---|---|
| **Photo No**: **5.** |  |
| **Direction Taken**: Northwest | |
| **Description**: View of the remediated area. | |

| | |
|---|---|
| **Photo No**: **6.** |  |
| **Direction Taken**: Southeast | |
| **Description**: View of the remediated area. | |

**PERMIAN BASIN**
**ENVIRONMENTAL LAB, LP**
**1400 Rankin Hwy**
**Midland, TX 79701**

PBELAB

# Analytical Report

**Prepared for:**

Matt Green

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100

Odessa, TX 79765

Project: Juice Bud State Com 502 A Wellhead

Project Number: 13717

Location: NM

Lab Order Number: 1C04015

NELAP ACCREDITED TNI LABORATORY

**NELAP/TCEQ # T104704516-17-8**

Report Date: 03/14/21

E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa TX, 79765

Project: Juice Bud State Com 502 A Wellhead
Project Number: 13717
Project Manager: Matt Green

Fax: (432) 563-2213

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| BH1 @ 18" | 1C04015-01 | Soil | 03/02/21 08:05 | 03-04-2021 15:03 |
| BH2 @ 18" | 1C04015-02 | Soil | 03/02/21 08:10 | 03-04-2021 15:03 |
| BH3 @ 18" | 1C04015-03 | Soil | 03/02/21 08:15 | 03-04-2021 15:03 |
| NWW | 1C04015-04 | Soil | 03/02/21 09:35 | 03-04-2021 15:03 |
| NEW | 1C04015-05 | Soil | 03/02/21 09:40 | 03-04-2021 15:03 |
| SWW | 1C04015-06 | Soil | 03/02/21 09:45 | 03-04-2021 15:03 |
| SEW | 1C04015-07 | Soil | 03/02/21 09:50 | 03-04-2021 15:03 |

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## BH1 @ 18''

**1C04015-01 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| **Benzene** | **0.00428** | 0.00103 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Toluene** | **0.0155** | 0.00103 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Ethylbenzene** | **0.00670** | 0.00103 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Xylene (p/m)** | **0.0369** | 0.00206 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Xylene (o)** | **0.0122** | 0.00103 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| *Surrogate: 4-Bromofluorobenzene* | | *105 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| *Surrogate: 1,4-Difluorobenzene* | | *113 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **96.9** | 1.03 | mg/kg dry | 1 | P1C1003 | 03/10/21 | 03/11/21 | EPA 300.0 | |
| **% Moisture** | **3.0** | 0.1 | % | 1 | P1C0603 | 03/08/21 | 03/08/21 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| **C6-C12** | **150** | 25.8 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| **>C12-C28** | **2260** | 25.8 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| **>C28-C35** | **380** | 25.8 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *122 %* | *70-130* | | *P1C0508* | *03/05/21* | *03/05/21* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *139 %* | *70-130* | | *P1C0508* | *03/05/21* | *03/05/21* | *TPH 8015M* | *S-GC* |
| **Total Petroleum Hydrocarbon C6-C35** | **2790** | 25.8 | mg/kg dry | 1 | [CALC] | 03/05/21 | 03/05/21 | calc | |

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## BH2 @ 18"

**1C04015-02 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| **Benzene** | **0.00143** | 0.00106 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Toluene** | **0.00910** | 0.00106 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Ethylbenzene** | **0.00164** | 0.00106 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Xylene (p/m)** | **0.00495** | 0.00213 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Xylene (o)** | **0.00107** | 0.00106 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| *Surrogate: 1,4-Difluorobenzene* | | *107 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| *Surrogate: 4-Bromofluorobenzene* | | *112 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **127** | 1.06 | mg/kg dry | 1 | P1C1003 | 03/10/21 | 03/11/21 | EPA 300.0 | |
| **% Moisture** | **6.0** | 0.1 | % | 1 | P1C0603 | 03/08/21 | 03/08/21 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| **C6-C12** | **30.5** | 26.6 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| **>C12-C28** | **959** | 26.6 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| **>C28-C35** | **185** | 26.6 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *125 %* | *70-130* | | *P1C0508* | *03/05/21* | *03/05/21* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *141 %* | *70-130* | | *P1C0508* | *03/05/21* | *03/05/21* | *TPH 8015M* | *S-GC* |
| **Total Petroleum Hydrocarbon C6-C35** | **1170** | 26.6 | mg/kg dry | 1 | [CALC] | 03/05/21 | 03/05/21 | calc | |

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## BH3 @ 18"

**1C04015-03 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| **Benzene** | **0.00183** | 0.00106 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Toluene** | **0.0117** | 0.00106 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Ethylbenzene** | **0.00238** | 0.00106 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Xylene (p/m)** | **0.00779** | 0.00213 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Xylene (o)** | **0.00306** | 0.00106 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| *Surrogate: 1,4-Difluorobenzene* | | *111 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| *Surrogate: 4-Bromofluorobenzene* | | *112 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **67.1** | 1.06 | mg/kg dry | 1 | P1C1003 | 03/10/21 | 03/11/21 | EPA 300.0 | |
| **% Moisture** | **6.0** | 0.1 | % | 1 | P1C0603 | 03/08/21 | 03/08/21 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| **C6-C12** | **33.9** | 26.6 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| **>C12-C28** | **1150** | 26.6 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| **>C28-C35** | **185** | 26.6 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *118 %* | *70-130* | | *P1C0508* | *03/05/21* | *03/05/21* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *133 %* | *70-130* | | *P1C0508* | *03/05/21* | *03/05/21* | *TPH 8015M* | *S-GC* |
| **Total Petroleum Hydrocarbon C6-C35** | **1370** | 26.6 | mg/kg dry | 1 | [CALC] | 03/05/21 | 03/05/21 | calc | |

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**NWW**

**1C04015-04 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| Benzene | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Toluene** | **0.00138** | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Ethylbenzene | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00211 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Xylene (o) | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| *Surrogate: 1,4-Difluorobenzene* | | *102 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| *Surrogate: 4-Bromofluorobenzene* | | *113 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **164** | 1.05 | mg/kg dry | 1 | P1C1003 | 03/10/21 | 03/11/21 | EPA 300.0 | |
| **% Moisture** | **5.0** | 0.1 | % | 1 | P1C0603 | 03/08/21 | 03/08/21 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 26.3 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| **>C12-C28** | **88.0** | 26.3 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| **>C28-C35** | **26.4** | 26.3 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *120 %* | *70-130* | | *P1C0508* | *03/05/21* | *03/05/21* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *136 %* | *70-130* | | *P1C0508* | *03/05/21* | *03/05/21* | *TPH 8015M* | *S-GC* |
| **Total Petroleum Hydrocarbon C6-C35** | **114** | 26.3 | mg/kg dry | 1 | [CALC] | 03/05/21 | 03/05/21 | calc | |

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**NEW**

**1C04015-05 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| Benzene | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Toluene** | **0.00128** | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Ethylbenzene | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00211 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Xylene (o) | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| *Surrogate: 4-Bromofluorobenzene* | | *113 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| *Surrogate: 1,4-Difluorobenzene* | | *102 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **39.1** | 1.05 | mg/kg dry | 1 | P1C1101 | 03/11/21 | 03/11/21 | EPA 300.0 | |
| **% Moisture** | **5.0** | 0.1 | % | 1 | P1C0603 | 03/08/21 | 03/08/21 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 26.3 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| **>C12-C28** | **72.6** | 26.3 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| >C28-C35 | ND | 26.3 | mg/kg dry | 1 | P1C0508 | 03/05/21 | 03/05/21 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *116 %* | *70-130* | | *P1C0508* | *03/05/21* | *03/05/21* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *131 %* | *70-130* | | *P1C0508* | *03/05/21* | *03/05/21* | *TPH 8015M* | *S-GC* |
| **Total Petroleum Hydrocarbon C6-C35** | **72.6** | 26.3 | mg/kg dry | 1 | [CALC] | 03/05/21 | 03/05/21 | calc | |

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## SWW

**1C04015-06 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| Benzene | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| **Toluene** | **0.00179** | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Ethylbenzene | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00211 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Xylene (o) | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| *Surrogate: 4-Bromofluorobenzene* | | *118 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| *Surrogate: 1,4-Difluorobenzene* | | *107 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **56.7** | 1.05 | mg/kg dry | 1 | P1C1101 | 03/11/21 | 03/11/21 | EPA 300.0 | |
| **% Moisture** | **5.0** | 0.1 | % | 1 | P1C0603 | 03/08/21 | 03/08/21 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 26.3 | mg/kg dry | 1 | P1C0511 | 03/05/21 | 03/07/21 | TPH 8015M | |
| >C12-C28 | ND | 26.3 | mg/kg dry | 1 | P1C0511 | 03/05/21 | 03/07/21 | TPH 8015M | |
| >C28-C35 | ND | 26.3 | mg/kg dry | 1 | P1C0511 | 03/05/21 | 03/07/21 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *111 %* | *70-130* | | *P1C0511* | *03/05/21* | *03/07/21* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *124 %* | *70-130* | | *P1C0511* | *03/05/21* | *03/07/21* | *TPH 8015M* | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 26.3 | mg/kg dry | 1 | [CALC] | 03/05/21 | 03/07/21 | calc | |

| | | |
|---|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead | Fax: (432) 563-2213 |
| 13000 West County Road 100 | Project Number: 13717 | |
| Odessa TX, 79765 | Project Manager: Matt Green | |

**SEW**

**1C04015-07 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| Benzene | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Toluene | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Ethylbenzene | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00211 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| Xylene (o) | ND | 0.00105 | mg/kg dry | 1 | P1C0506 | 03/05/21 | 03/05/21 | EPA 8021B | |
| *Surrogate: 1,4-Difluorobenzene* | | *106 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| *Surrogate: 4-Bromofluorobenzene* | | *117 %* | *80-120* | | *P1C0506* | *03/05/21* | *03/05/21* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **107** | 1.05 | mg/kg dry | 1 | P1C1101 | 03/11/21 | 03/11/21 | EPA 300.0 | |
| **% Moisture** | **5.0** | 0.1 | % | 1 | P1C0603 | 03/08/21 | 03/08/21 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 26.3 | mg/kg dry | 1 | P1C0511 | 03/05/21 | 03/07/21 | TPH 8015M | |
| >C12-C28 | ND | 26.3 | mg/kg dry | 1 | P1C0511 | 03/05/21 | 03/07/21 | TPH 8015M | |
| >C28-C35 | ND | 26.3 | mg/kg dry | 1 | P1C0511 | 03/05/21 | 03/07/21 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *111 %* | *70-130* | | *P1C0511* | *03/05/21* | *03/07/21* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *125 %* | *70-130* | | *P1C0511* | *03/05/21* | *03/07/21* | *TPH 8015M* | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 26.3 | mg/kg dry | 1 | [CALC] | 03/05/21 | 03/07/21 | calc | |

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## BTEX by 8021B - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1C0506 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Blank (P1C0506-BLK1)** | | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| Benzene | ND | 0.00100 | mg/kg wet | | | | | | | |
| Toluene | ND | 0.00100 | " | | | | | | | |
| Ethylbenzene | ND | 0.00100 | " | | | | | | | |
| Xylene (p/m) | ND | 0.00200 | " | | | | | | | |
| Xylene (o) | ND | 0.00100 | " | | | | | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.124* | | *"* | *0.120* | | *103* | *80-120* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.128* | | *"* | *0.120* | | *107* | *80-120* | | | |
| **LCS (P1C0506-BS1)** | | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| Benzene | 0.102 | 0.00100 | mg/kg wet | 0.100 | | 102 | 70-130 | | | |
| Toluene | 0.111 | 0.00100 | " | 0.100 | | 111 | 70-130 | | | |
| Ethylbenzene | 0.117 | 0.00100 | " | 0.100 | | 117 | 70-130 | | | |
| Xylene (p/m) | 0.238 | 0.00200 | " | 0.200 | | 119 | 70-130 | | | |
| Xylene (o) | 0.120 | 0.00100 | " | 0.100 | | 120 | 70-130 | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.124* | | *"* | *0.120* | | *103* | *80-120* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.127* | | *"* | *0.120* | | *106* | *80-120* | | | |
| **LCS Dup (P1C0506-BSD1)** | | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| Benzene | 0.0992 | 0.00100 | mg/kg wet | 0.100 | | 99.2 | 70-130 | 2.71 | 20 | |
| Toluene | 0.110 | 0.00100 | " | 0.100 | | 110 | 70-130 | 1.07 | 20 | |
| Ethylbenzene | 0.112 | 0.00100 | " | 0.100 | | 112 | 70-130 | 4.14 | 20 | |
| Xylene (p/m) | 0.237 | 0.00200 | " | 0.200 | | 118 | 70-130 | 0.652 | 20 | |
| Xylene (o) | 0.111 | 0.00100 | " | 0.100 | | 111 | 70-130 | 7.47 | 20 | |
| *Surrogate: 1,4-Difluorobenzene* | *0.120* | | *"* | *0.120* | | *99.6* | *80-120* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.123* | | *"* | *0.120* | | *103* | *80-120* | | | |
| **Calibration Check (P1C0506-CCV1)** | | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| Benzene | 0.0927 | 0.00100 | mg/kg wet | 0.100 | | 92.7 | 80-120 | | | |
| Toluene | 0.100 | 0.00100 | " | 0.100 | | 100 | 80-120 | | | |
| Ethylbenzene | 0.117 | 0.00100 | " | 0.100 | | 117 | 80-120 | | | |
| Xylene (p/m) | 0.240 | 0.00200 | " | 0.200 | | 120 | 80-120 | | | |
| Xylene (o) | 0.107 | 0.00100 | " | 0.100 | | 107 | 80-120 | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.127* | | *"* | *0.120* | | *105* | *75-125* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.129* | | *"* | *0.120* | | *108* | *75-125* | | | |

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Project: Juice Bud State Com 502 A Wellhead
Project Number: 13717
Project Manager: Matt Green

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## BTEX by 8021B - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1C0506 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Calibration Check (P1C0506-CCV2)** | | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| Benzene | 0.0967 | 0.00100 | mg/kg wet | 0.100 | | 96.7 | 80-120 | | | |
| Toluene | 0.106 | 0.00100 | " | 0.100 | | 106 | 80-120 | | | |
| Ethylbenzene | 0.120 | 0.00100 | " | 0.100 | | 120 | 80-120 | | | |
| Xylene (p/m) | 0.234 | 0.00200 | " | 0.200 | | 117 | 80-120 | | | |
| Xylene (o) | 0.117 | 0.00100 | " | 0.100 | | 117 | 80-120 | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.128* | | " | *0.120* | | *106* | *75-125* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.136* | | " | *0.120* | | *113* | *75-125* | | | |
| **Calibration Check (P1C0506-CCV3)** | | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| Benzene | 0.0954 | 0.00100 | mg/kg wet | 0.100 | | 95.4 | 80-120 | | | |
| Toluene | 0.108 | 0.00100 | " | 0.100 | | 108 | 80-120 | | | |
| Ethylbenzene | 0.120 | 0.00100 | " | 0.100 | | 120 | 80-120 | | | |
| Xylene (p/m) | 0.235 | 0.00200 | " | 0.200 | | 118 | 80-120 | | | |
| Xylene (o) | 0.115 | 0.00100 | " | 0.100 | | 115 | 80-120 | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.124* | | " | *0.120* | | *103* | *75-125* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.138* | | " | *0.120* | | *115* | *75-125* | | | |
| **Matrix Spike (P1C0506-MS1)** | | **Source: 1C04015-01** | | Prepared & Analyzed: 03/05/21 | | | | | | |
| Benzene | 0.0692 | 0.00103 | mg/kg dry | 0.103 | 0.00428 | 63.0 | 80-120 | | | QM-07 |
| Toluene | 0.0619 | 0.00103 | " | 0.103 | 0.0155 | 45.1 | 80-120 | | | QM-07 |
| Ethylbenzene | 0.0400 | 0.00103 | " | 0.103 | 0.00670 | 32.3 | 80-120 | | | QM-07 |
| Xylene (p/m) | 0.0914 | 0.00206 | " | 0.206 | 0.0369 | 26.4 | 80-120 | | | QM-07 |
| Xylene (o) | 0.0539 | 0.00103 | " | 0.103 | 0.0122 | 40.5 | 80-120 | | | QM-07 |
| *Surrogate: 4-Bromofluorobenzene* | *0.118* | | " | *0.124* | | *95.1* | *80-120* | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.128* | | " | *0.124* | | *103* | *80-120* | | | |
| **Matrix Spike Dup (P1C0506-MSD1)** | | **Source: 1C04015-01** | | Prepared & Analyzed: 03/05/21 | | | | | | |
| Benzene | 0.0847 | 0.00103 | mg/kg dry | 0.103 | 0.00428 | 78.0 | 80-120 | 21.3 | 20 | QM-07 |
| Toluene | 0.0791 | 0.00103 | " | 0.103 | 0.0155 | 61.7 | 80-120 | 31.2 | 20 | QM-07 |
| Ethylbenzene | 0.0564 | 0.00103 | " | 0.103 | 0.00670 | 48.2 | 80-120 | 39.5 | 20 | QM-07 |
| Xylene (p/m) | 0.119 | 0.00206 | " | 0.206 | 0.0369 | 39.6 | 80-120 | 39.9 | 20 | QM-07 |
| Xylene (o) | 0.0686 | 0.00103 | " | 0.103 | 0.0122 | 54.7 | 80-120 | 29.9 | 20 | QM-07 |
| *Surrogate: 1,4-Difluorobenzene* | *0.133* | | " | *0.124* | | *108* | *80-120* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.127* | | " | *0.124* | | *103* | *80-120* | | | |

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Project Number: 13717
Project Manager: Matt Green

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## General Chemistry Parameters by EPA / Standard Methods - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1C0603 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Blank (P1C0603-BLK1)** | | | | Prepared & Analyzed: 03/08/21 | | | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| **Batch P1C1003 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Blank (P1C1003-BLK1)** | | | | Prepared: 03/10/21 Analyzed: 03/11/21 | | | | | | |
| Chloride | ND | 1.00 | mg/kg wet | | | | | | | |
| **LCS (P1C1003-BS1)** | | | | Prepared: 03/10/21 Analyzed: 03/11/21 | | | | | | |
| Chloride | 388 | 1.00 | mg/kg wet | 400 | | 97.1 | 90-110 | | | |
| **LCS Dup (P1C1003-BSD1)** | | | | Prepared: 03/10/21 Analyzed: 03/11/21 | | | | | | |
| Chloride | 383 | 1.00 | mg/kg wet | 400 | | 95.9 | 90-110 | 1.29 | 20 | |
| **Calibration Check (P1C1003-CCV1)** | | | | Prepared: 03/10/21 Analyzed: 03/11/21 | | | | | | |
| Chloride | 18.9 | | mg/kg | 20.0 | | 94.6 | 90-110 | | | |
| **Calibration Check (P1C1003-CCV2)** | | | | Prepared: 03/10/21 Analyzed: 03/11/21 | | | | | | |
| Chloride | 18.3 | | mg/kg | 20.0 | | 91.6 | 90-110 | | | |
| **Calibration Check (P1C1003-CCV3)** | | | | Prepared: 03/10/21 Analyzed: 03/11/21 | | | | | | |
| Chloride | 18.4 | | mg/kg | 20.0 | | 92.1 | 90-110 | | | |
| **Matrix Spike (P1C1003-MS1)** | | **Source: 1C09008-17** | | Prepared: 03/10/21 Analyzed: 03/11/21 | | | | | | |
| Chloride | 15400 | 52.6 | mg/kg dry | 5260 | 10500 | 93.5 | 80-120 | | | |
| **Matrix Spike (P1C1003-MS2)** | | **Source: 1C04013-09** | | Prepared: 03/10/21 Analyzed: 03/11/21 | | | | | | |
| Chloride | 699 | 1.01 | mg/kg dry | 505 | 373 | 64.6 | 80-120 | | | |

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## General Chemistry Parameters by EPA / Standard Methods - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1C1003 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Matrix Spike Dup (P1C1003-MSD1)** | **Source: 1C09008-17** | | | Prepared: 03/10/21 Analyzed: 03/11/21 | | | | | | |
| Chloride | 15700 | 52.6 | mg/kg dry | 5260 | 10500 | 98.8 | 80-120 | 1.79 | 20 | |
| **Matrix Spike Dup (P1C1003-MSD2)** | **Source: 1C04013-09** | | | Prepared: 03/10/21 Analyzed: 03/11/21 | | | | | | |
| Chloride | 744 | 1.01 | mg/kg dry | 505 | 373 | 73.6 | 80-120 | 6.25 | 20 | |
| **Batch P1C1101 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Blank (P1C1101-BLK1)** | | | | Prepared & Analyzed: 03/11/21 | | | | | | |
| Chloride | ND | 1.00 | mg/kg wet | | | | | | | |
| **LCS (P1C1101-BS1)** | | | | Prepared & Analyzed: 03/11/21 | | | | | | |
| Chloride | 385 | 1.00 | mg/kg wet | 400 | | 96.4 | 90-110 | | | |
| **LCS Dup (P1C1101-BSD1)** | | | | Prepared & Analyzed: 03/11/21 | | | | | | |
| Chloride | 388 | 1.00 | mg/kg wet | 400 | | 97.1 | 90-110 | 0.773 | 20 | |
| **Calibration Check (P1C1101-CCV1)** | | | | Prepared & Analyzed: 03/11/21 | | | | | | |
| Chloride | 18.5 | | mg/kg | 20.0 | | 92.3 | 90-110 | | | |
| **Calibration Check (P1C1101-CCV2)** | | | | Prepared & Analyzed: 03/11/21 | | | | | | |
| Chloride | 18.2 | | mg/kg | 20.0 | | 91.1 | 90-110 | | | |
| **Calibration Check (P1C1101-CCV3)** | | | | Prepared & Analyzed: 03/11/21 | | | | | | |
| Chloride | 18.6 | | mg/kg | 20.0 | | 92.9 | 90-110 | | | |
| **Matrix Spike (P1C1101-MS1)** | **Source: 1C04015-05** | | | Prepared & Analyzed: 03/11/21 | | | | | | |
| Chloride | 542 | 1.05 | mg/kg dry | 526 | 39.1 | 95.6 | 80-120 | | | |

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## General Chemistry Parameters by EPA / Standard Methods - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1C1101 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Matrix Spike (P1C1101-MS2)** | **Source: 1C04016-08** | | | Prepared & Analyzed: 03/11/21 | | | | | | |
| Chloride | 1340 | 1.03 | mg/kg dry | 515 | 954 | 75.4 | 80-120 | | | |
| **Matrix Spike Dup (P1C1101-MSD1)** | **Source: 1C04015-05** | | | Prepared & Analyzed: 03/11/21 | | | | | | |
| Chloride | 504 | 1.05 | mg/kg dry | 526 | 39.1 | 88.4 | 80-120 | 7.24 | 20 | |
| **Matrix Spike Dup (P1C1101-MSD2)** | **Source: 1C04016-08** | | | Prepared & Analyzed: 03/11/21 | | | | | | |
| Chloride | 1400 | 1.03 | mg/kg dry | 515 | 954 | 86.6 | 80-120 | 4.23 | 20 | |

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## Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1C0508 - TX 1005** | | | | | | | | | | |
| **Blank (P1C0508-BLK1)** | | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| C6-C12 | ND | 25.0 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.0 | " | | | | | | | |
| >C28-C35 | ND | 25.0 | " | | | | | | | |
| *Surrogate: 1-Chlorooctane* | *104* | | *"* | *100* | | *104* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *56.6* | | *"* | *50.0* | | *113* | *70-130* | | | |
| **LCS (P1C0508-BS1)** | | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| C6-C12 | 977 | 25.0 | mg/kg wet | 1000 | | 97.7 | 75-125 | | | |
| >C12-C28 | 1090 | 25.0 | " | 1000 | | 109 | 75-125 | | | |
| *Surrogate: 1-Chlorooctane* | *105* | | *"* | *100* | | *105* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *60.8* | | *"* | *50.0* | | *122* | *70-130* | | | |
| **LCS Dup (P1C0508-BSD1)** | | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| C6-C12 | 974 | 25.0 | mg/kg wet | 1000 | | 97.4 | 75-125 | 0.339 | 20 | |
| >C12-C28 | 1060 | 25.0 | " | 1000 | | 106 | 75-125 | 2.00 | 20 | |
| *Surrogate: 1-Chlorooctane* | *106* | | *"* | *100* | | *106* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *58.7* | | *"* | *50.0* | | *117* | *70-130* | | | |
| **Calibration Check (P1C0508-CCV1)** | | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| C6-C12 | 486 | 25.0 | mg/kg wet | 500 | | 97.2 | 85-115 | | | |
| >C12-C28 | 529 | 25.0 | " | 500 | | 106 | 85-115 | | | |
| *Surrogate: 1-Chlorooctane* | *123* | | *"* | *100* | | *123* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *58.4* | | *"* | *50.0* | | *117* | *70-130* | | | |
| **Calibration Check (P1C0508-CCV2)** | | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| C6-C12 | 488 | 25.0 | mg/kg wet | 500 | | 97.5 | 85-115 | | | |
| >C12-C28 | 501 | 25.0 | " | 500 | | 100 | 85-115 | | | |
| *Surrogate: 1-Chlorooctane* | *101* | | *"* | *100* | | *101* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *55.4* | | *"* | *50.0* | | *111* | *70-130* | | | |

| | | |
|---|---|---|
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| 13000 West County Road 100 | Project Number: 13717 | |
| Odessa TX, 79765 | Project Manager: Matt Green | |

## Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1C0508 - TX 1005** | | | | | | | | | | |
| **Matrix Spike (P1C0508-MS1)** | **Source: 1C04005-02** | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| C6-C12 | 856 | 27.2 | mg/kg dry | 1090 | 19.8 | 76.9 | 75-125 | | | |
| >C12-C28 | 1110 | 27.2 | " | 1090 | 900 | 19.5 | 75-125 | | | QM-05 |
| *Surrogate: 1-Chlorooctane* | *102* | | *"* | *109* | | *94.0* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *56.5* | | *"* | *54.3* | | *104* | *70-130* | | | |
| **Matrix Spike Dup (P1C0508-MSD1)** | **Source: 1C04005-02** | | | Prepared & Analyzed: 03/05/21 | | | | | | |
| C6-C12 | 865 | 27.2 | mg/kg dry | 1090 | 19.8 | 77.8 | 75-125 | 1.13 | 20 | |
| >C12-C28 | 1140 | 27.2 | " | 1090 | 900 | 21.6 | 75-125 | 10.2 | 20 | QM-05 |
| *Surrogate: 1-Chlorooctane* | *103* | | *"* | *109* | | *94.5* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *56.8* | | *"* | *54.3* | | *105* | *70-130* | | | |
| **Batch P1C0511 - TX 1005** | | | | | | | | | | |
| **Blank (P1C0511-BLK1)** | | | | Prepared: 03/05/21 Analyzed: 03/07/21 | | | | | | |
| C6-C12 | ND | 25.0 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.0 | " | | | | | | | |
| >C28-C35 | ND | 25.0 | " | | | | | | | |
| *Surrogate: 1-Chlorooctane* | *101* | | *"* | *100* | | *101* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *55.3* | | *"* | *50.0* | | *111* | *70-130* | | | |
| **LCS (P1C0511-BS1)** | | | | Prepared: 03/05/21 Analyzed: 03/07/21 | | | | | | |
| C6-C12 | 926 | 25.0 | mg/kg wet | 1000 | | 92.6 | 75-125 | | | |
| >C12-C28 | 1010 | 25.0 | " | 1000 | | 101 | 75-125 | | | |
| *Surrogate: 1-Chlorooctane* | *98.5* | | *"* | *100* | | *98.5* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *53.0* | | *"* | *50.0* | | *106* | *70-130* | | | |
| **LCS Dup (P1C0511-BSD1)** | | | | Prepared: 03/05/21 Analyzed: 03/07/21 | | | | | | |
| C6-C12 | 943 | 25.0 | mg/kg wet | 1000 | | 94.3 | 75-125 | 1.85 | 20 | |
| >C12-C28 | 1030 | 25.0 | " | 1000 | | 103 | 75-125 | 1.21 | 20 | |
| *Surrogate: 1-Chlorooctane* | *99.1* | | *"* | *100* | | *99.1* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *56.9* | | *"* | *50.0* | | *114* | *70-130* | | | |

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## Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1C0511 - TX 1005** | | | | | | | | | | |
| **Calibration Check (P1C0511-CCV1)** | | | | Prepared: 03/05/21 Analyzed: 03/07/21 | | | | | | |
| C6-C12 | 467 | 25.0 | mg/kg wet | 500 | | 93.5 | 85-115 | | | |
| >C12-C28 | 477 | 25.0 | " | 500 | | 95.3 | 85-115 | | | |
| *Surrogate: 1-Chlorooctane* | *89.7* | | *"* | *100* | | *89.7* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *49.1* | | *"* | *50.0* | | *98.1* | *70-130* | | | |
| **Calibration Check (P1C0511-CCV2)** | | | | Prepared: 03/05/21 Analyzed: 03/07/21 | | | | | | |
| C6-C12 | 449 | 25.0 | mg/kg wet | 500 | | 89.7 | 85-115 | | | |
| >C12-C28 | 479 | 25.0 | " | 500 | | 95.8 | 85-115 | | | |
| *Surrogate: 1-Chlorooctane* | *88.0* | | *"* | *100* | | *88.0* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *48.2* | | *"* | *50.0* | | *96.5* | *70-130* | | | |
| **Matrix Spike (P1C0511-MS1)** | | **Source: 1C04016-16** | | Prepared: 03/05/21 Analyzed: 03/07/21 | | | | | | |
| C6-C12 | 942 | 26.3 | mg/kg dry | 1050 | ND | 89.5 | 75-125 | | | |
| >C12-C28 | 1010 | 26.3 | " | 1050 | ND | 96.0 | 75-125 | | | |
| *Surrogate: 1-Chlorooctane* | *109* | | *"* | *105* | | *103* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *67.8* | | *"* | *52.6* | | *129* | *70-130* | | | |
| **Matrix Spike Dup (P1C0511-MSD1)** | | **Source: 1C04016-16** | | Prepared: 03/05/21 Analyzed: 03/07/21 | | | | | | |
| C6-C12 | 915 | 26.3 | mg/kg dry | 1050 | ND | 87.0 | 75-125 | 2.84 | 20 | |
| >C12-C28 | 993 | 26.3 | " | 1050 | ND | 94.3 | 75-125 | 1.76 | 20 | |
| *Surrogate: 1-Chlorooctane* | *110* | | *"* | *105* | | *105* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *62.7* | | *"* | *52.6* | | *119* | *70-130* | | | |

| | | |
|---|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead | Fax: (432) 563-2213 |
| 13000 West County Road 100 | Project Number: 13717 | |
| Odessa TX, 79765 | Project Manager: Matt Green | |

## Notes and Definitions

| | |
|---|---|
| S-GC | Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate. |
| ROI | Received on Ice |
| QM-07 | The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery. |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| BULK | Samples received in Bulk soil containers |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| LCS | Laboratory Control Spike |
| MS | Matrix Spike |
| Dup | Duplicate |

Report Approved By: Brent Barron Date: 3/14/2021

Brent Barron, Laboratory Director/Technical Director

| | | |
|---|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead | Fax: (432) 563-2213 |
| 13000 West County Road 100 | Project Number: 13717 | |
| Odessa TX, 79765 | Project Manager: Matt Green | |

# PBELAB Permian Basin Environmental Lab, LP

1400 Rankin Hwy Midland Texas 79701 Phone: 432-686-7235

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: Juica Bud Stake com 502 H well
Project #: 13717 Project Loc: NM
Area: PO#: N/A

☐ Bill Etech

Report Format: STANDARD:☐ TRRP:☐ NPDES:☐

Project Manager: Matt Green
Company Name: Etech Environmental & Safety Solutions, Inc.
Company Address: P.O. Box 8469
City/State/Zip: Midland, Texas 79708
Sampler Signature: email: matt@etechenv.com

(lab use only)
ORDER #: 1C04015

| LAB # (lab use only) | FIELD CODE | Start Depth | End Depth | Date Sampled | Time Sampled | Preservation & # of Containers: No. of Containers | Ice | $HNO_3$ | HCl | $H_2SO_4$ | NaOH | $Na_2S_2O_3$ | None | Other (Specify) | Matrix: DW=Drinking Water SL=Sludge / GW=Groundwater S=Soil/Solid / NP=Non-Potable Specify Other | Analyze For: TPH: 418.1 8015M 1005 1006 | Cations (Ca, Mg, Na, K) | Anions (Cl, SO4, CO3, HCO3) | SAR / ESP / CEC | Metals: As Ag Ba Cd Cr Pb Hg Se | Volatiles | Semi volatiles | BTEX 8021B 5030 or BTEX 8260 | RCI | N.O.R.M. | Chlorides | RUSH TAT(Pre-Schedule) 24, 48, 72 hrs | STANDARD TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BH 1 | | 18" | 3/2 | 8:05 | 1 | X | | | | | | | | S | X | | | | | | | X | | | X | | X |
| 2 | BH 2 | | 18" | | 8:10 | 1 | X | | | | | | | | | | | | | | | | | | | | | X |
| 3 | BH 3 | | 18" | | 8:15 | 1 | X | | | | | | | | | | | | | | | | | | | | | X |
| 4 | NW | | | | 9:35 | 1 | X | | | | | | | | | | | | | | | | | | | | | X |
| 5 | NEW | | | | 9:40 | 1 | X | | | | | | | | | | | | | | | | | | | | | X |
| 6 | SW | | | | 9:45 | 1 | X | | | | | | | | | | | | | | | | | | | | | X |
| 7 | SEW | | | | 9:50 | 1 | X | | | | | | | | | | | | | | | | | | | | | X |

Special Instructions:

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| | 3/4/21 | 15:03 | | | |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | 3/4/21 | 15:03 |

Laboratory Comments:

| | | |
|---|---|---|
| Sample Containers Intact? | Y | N |
| VOCs Free of Headspace? | Y | N |
| Custody seals on container(s) | Y | N |
| Custody seals on cooler(s) | Y | N |
| Sample Hand Delivered | Y | N |
| Sar by Sampler/Client Rep. ? | Y | N |

Sar by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 4.5.2 CF +1 °C

**PERMIAN BASIN**
**ENVIRONMENTAL LAB, LP**
**1400 Rankin Hwy**
**Midland, TX 79701**

PBELAB

# Analytical Report

**Prepared for:**

Matt Green

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100

Odessa, TX 79765

Project: Juice Bud State Com 502 A Wellhead

Project Number: 13717

Location: Lea County, NM

Lab Order Number: 1D05013

NELAP ACCREDITED TNI LABORATORY

**NELAP/TCEQ # T104704516-17-8**

Report Date: 04/09/21

E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa TX, 79765

Project: Juice Bud State Com 502 A Wellhead
Project Number: 13717
Project Manager: Matt Green

Fax: (432) 563-2213

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| BH-1A @ 24" | 1D05013-01 | Soil | 03/30/21 13:00 | 04-05-2021 16:34 |
| BH-2A @ 24" | 1D05013-02 | Soil | 03/30/21 13:05 | 04-05-2021 16:34 |
| BH-3A @ 24" | 1D05013-03 | Soil | 03/30/21 13:10 | 04-05-2021 16:34 |
| NWW-4A @ 12" | 1D05013-04 | Soil | 03/30/21 13:15 | 04-05-2021 16:34 |

| | | |
|---|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead | Fax: (432) 563-2213 |
| 13000 West County Road 100 | Project Number: 13717 | |
| Odessa TX, 79765 | Project Manager: Matt Green | |

## BH-1A @ 24''

**1D05013-01 (Soil)**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **Permian Basin Environmental Lab, L.P.** | | | | | | | | | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **% Moisture** | **2.0** | 0.1 | % | 1 | P1D0604 | 04/06/21 | 04/06/21 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 25.5 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| **>C12-C28** | **50.9** | 25.5 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| **>C28-C35** | **26.4** | 25.5 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *98.8 %* | *70-130* | | *P1D0701* | *04/07/21* | *04/07/21* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *98.9 %* | *70-130* | | *P1D0701* | *04/07/21* | *04/07/21* | *TPH 8015M* | |
| **Total Petroleum Hydrocarbon C6-C35** | **77.3** | 25.5 | mg/kg dry | 1 | [CALC] | 04/07/21 | 04/07/21 | calc | |

| | | |
|---|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead | Fax: (432) 563-2213 |
| 13000 West County Road 100 | Project Number: 13717 | |
| Odessa TX, 79765 | Project Manager: Matt Green | |

**BH-2A @ 24"**

**1D05013-02 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **% Moisture** | **5.0** | 0.1 | % | 1 | P1D0604 | 04/06/21 | 04/06/21 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 26.3 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| >C12-C28 | ND | 26.3 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| >C28-C35 | ND | 26.3 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *101 %* | *70-130* | | *P1D0701* | *04/07/21* | *04/07/21* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *103 %* | *70-130* | | *P1D0701* | *04/07/21* | *04/07/21* | *TPH 8015M* | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 26.3 | mg/kg dry | 1 | [CALC] | 04/07/21 | 04/07/21 | calc | |

E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa TX, 79765

Project: Juice Bud State Com 502 A Wellhead
Project Number: 13717
Project Manager: Matt Green

Fax: (432) 563-2213

**BH-3A @ 24"**

**1D05013-03 (Soil)**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **Permian Basin Environmental Lab, L.P.** | | | | | | | | | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **% Moisture** | **5.0** | 0.1 | % | 1 | P1D0604 | 04/06/21 | 04/06/21 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 26.3 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| >C12-C28 | ND | 26.3 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| >C28-C35 | ND | 26.3 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *102 %* | *70-130* | | *P1D0701* | *04/07/21* | *04/07/21* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *103 %* | *70-130* | | *P1D0701* | *04/07/21* | *04/07/21* | *TPH 8015M* | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 26.3 | mg/kg dry | 1 | [CALC] | 04/07/21 | 04/07/21 | calc | |

| | | |
|---|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead | Fax: (432) 563-2213 |
| 13000 West County Road 100 | Project Number: 13717 | |
| Odessa TX, 79765 | Project Manager: Matt Green | |

**NWW-4A @ 12"**

**1D05013-04 (Soil)**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **Permian Basin Environmental Lab, L.P.** | | | | | | | | | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **% Moisture** | **5.0** | 0.1 | % | 1 | P1D0604 | 04/06/21 | 04/06/21 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 26.3 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| >C12-C28 | ND | 26.3 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| >C28-C35 | ND | 26.3 | mg/kg dry | 1 | P1D0701 | 04/07/21 | 04/07/21 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *95.3 %* | *70-130* | | *P1D0701* | *04/07/21* | *04/07/21* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *96.6 %* | *70-130* | | *P1D0701* | *04/07/21* | *04/07/21* | *TPH 8015M* | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 26.3 | mg/kg dry | 1 | [CALC] | 04/07/21 | 04/07/21 | calc | |

E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa TX, 79765

Project: Juice Bud State Com 502 A Wellhead
Project Number: 13717
Project Manager: Matt Green

Fax: (432) 563-2213

## General Chemistry Parameters by EPA / Standard Methods - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1D0604 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Blank (P1D0604-BLK1)** | | | | Prepared & Analyzed: 04/06/21 | | | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| **Blank (P1D0604-BLK2)** | | | | Prepared & Analyzed: 04/06/21 | | | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| **Duplicate (P1D0604-DUP1)** | **Source: 1D05004-09** | | | Prepared & Analyzed: 04/06/21 | | | | | | |
| % Moisture | 3.0 | 0.1 | % | | 4.0 | | | 28.6 | 20 | |
| **Duplicate (P1D0604-DUP2)** | **Source: 1D05006-01** | | | Prepared & Analyzed: 04/06/21 | | | | | | |
| % Moisture | 2.0 | 0.1 | % | | 1.0 | | | 66.7 | 20 | |
| **Duplicate (P1D0604-DUP3)** | **Source: 1D05011-02** | | | Prepared & Analyzed: 04/06/21 | | | | | | |
| % Moisture | 1.0 | 0.1 | % | | 2.0 | | | 66.7 | 20 | |

E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa TX, 79765

Project: Juice Bud State Com 502 A Wellhead
Project Number: 13717
Project Manager: Matt Green

Fax: (432) 563-2213

## Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1D0701 - TX 1005** | | | | | | | | | | |
| **Blank (P1D0701-BLK1)** | | | | Prepared & Analyzed: 04/07/21 | | | | | | |
| C6-C12 | ND | 25.0 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.0 | " | | | | | | | |
| >C28-C35 | ND | 25.0 | " | | | | | | | |
| *Surrogate: 1-Chlorooctane* | *98.2* | | " | *100* | | *98.2* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *49.5* | | " | *50.0* | | *98.9* | *70-130* | | | |
| **LCS (P1D0701-BS1)** | | | | Prepared & Analyzed: 04/07/21 | | | | | | |
| C6-C12 | 1020 | 25.0 | mg/kg wet | 1000 | | 102 | 75-125 | | | |
| >C12-C28 | 1050 | 25.0 | " | 1000 | | 105 | 75-125 | | | |
| *Surrogate: 1-Chlorooctane* | *99.6* | | " | *100* | | *99.6* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *50.6* | | " | *50.0* | | *101* | *70-130* | | | |
| **LCS Dup (P1D0701-BSD1)** | | | | Prepared & Analyzed: 04/07/21 | | | | | | |
| C6-C12 | 1010 | 25.0 | mg/kg wet | 1000 | | 101 | 75-125 | 0.932 | 20 | |
| >C12-C28 | 1030 | 25.0 | " | 1000 | | 103 | 75-125 | 1.47 | 20 | |
| *Surrogate: 1-Chlorooctane* | *99.7* | | " | *100* | | *99.7* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *50.6* | | " | *50.0* | | *101* | *70-130* | | | |
| **Calibration Check (P1D0701-CCV1)** | | | | Prepared & Analyzed: 04/07/21 | | | | | | |
| C6-C12 | 505 | 25.0 | mg/kg wet | 500 | | 101 | 85-115 | | | |
| >C12-C28 | 519 | 25.0 | " | 500 | | 104 | 85-115 | | | |
| *Surrogate: 1-Chlorooctane* | *116* | | " | *100* | | *116* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *49.9* | | " | *50.0* | | *99.7* | *70-130* | | | |
| **Calibration Check (P1D0701-CCV2)** | | | | Prepared & Analyzed: 04/07/21 | | | | | | |
| C6-C12 | 465 | 25.0 | mg/kg wet | 500 | | 92.9 | 85-115 | | | |
| >C12-C28 | 433 | 25.0 | " | 500 | | 86.6 | 85-115 | | | |
| *Surrogate: 1-Chlorooctane* | *109* | | " | *100* | | *109* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *47.2* | | " | *50.0* | | *94.3* | *70-130* | | | |

E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa TX, 79765

Project: Juice Bud State Com 502 A Wellhead
Project Number: 13717
Project Manager: Matt Green

Fax: (432) 563-2213

## Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1D0701 - TX 1005** | | | | | | | | | | |
| **Matrix Spike (P1D0701-MS1)** | **Source: 1D06001-14** | | | Prepared & Analyzed: 04/07/21 | | | | | | |
| C6-C12 | 1030 | 27.5 | mg/kg dry | 1100 | 12.3 | 92.8 | 75-125 | | | |
| >C12-C28 | 1220 | 27.5 | " | 1100 | 149 | 97.3 | 75-125 | | | |
| *Surrogate: 1-Chlorooctane* | *132* | | *"* | *110* | | *120* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *54.4* | | *"* | *54.9* | | *98.9* | *70-130* | | | |
| **Matrix Spike Dup (P1D0701-MSD1)** | **Source: 1D06001-14** | | | Prepared & Analyzed: 04/07/21 | | | | | | |
| C6-C12 | 1030 | 27.5 | mg/kg dry | 1100 | 12.3 | 92.8 | 75-125 | 0.00863 | 20 | |
| >C12-C28 | 1150 | 27.5 | " | 1100 | 149 | 91.3 | 75-125 | 6.32 | 20 | |
| *Surrogate: 1-Chlorooctane* | *131* | | *"* | *110* | | *119* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *52.8* | | *"* | *54.9* | | *96.0* | *70-130* | | | |

| | | |
|---|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead | Fax: (432) 563-2213 |
| 13000 West County Road 100 | Project Number: 13717 | |
| Odessa TX, 79765 | Project Manager: Matt Green | |

**Notes and Definitions**

| | |
|---|---|
| ROI | Received on Ice |
| BULK | Samples received in Bulk soil containers |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| LCS | Laboratory Control Spike |
| MS | Matrix Spike |
| Dup | Duplicate |

Report Approved By: Brent Barron Date: 4/9/2021

Brent Barron, Laboratory Director/Technical Director

# PBELAB Permian Basin Environmental Lab, LP

1400 Rankin Hwy Midland Texas 79701 Phone: 432-686-7235

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Matt Green
Company Name: Etech Environmental & Safety Solutions, Inc.
Company Address: P.O. Box 62228
City/State/Zip: Midland, Texas 79711
Sampler Signature: Matt Green email: matt@etechenv.com
tim@etechenv.com

Project Name: Centennial Juice But State COM 502H Wellhe
Project #: 13717 Project Loc: Lea Co. NM
Area: PO#: 38806

☐ Bill Etech

Report Format: STANDARD:☐ TRRP:☐ NPDES:☐

(lab use only)
ORDER #: 1D05013

| LAB # (lab use only) | FIELD CODE | Start Depth | End Depth | Date Sampled | Time Sampled | No. of Containers | Preservation & # of Containers: Ice | HNO3 | HCl | H2SO4 | NaOH | Na2S2O3 | None | Other (Specify) | Matrix: DW=Drinking Water SL=Sludge | GW = Groundwater S=Soil/Solid | NP=Non-PotableSpecify Other | Analyze For: TPH: 418.1 (8015M) 1005 1006 | Cations (Ca, Mg, Na, K) | Anions (Cl, SO4, CO3, HCO3) | SAR / ESP / CEC | Metals: As Ag Ba Cd Cr Pb Hg Se | Volatiles | Semi volatiles | BTEX 8021B/5030 or BTEX 8260 | RCI | N.O.R.M. | Chlorides | RUSH TAT(Pre-Schedule) 24, 48, 72 hrs | STANDARD TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BH-1A @24" | | | 3-30-21 | 1300 | 1 | X | | | | | | | | S | | | X | | | | | | | | | | | | |
| 2 | BH-2A @24" | | | 3-30-21 | 1305 | 1 | X | | | | | | | | S | | | X | | | | | | | | | | | | |
| 3 | BH-3A @24" | | | 3-30-21 | 1310 | 1 | X | | | | | | | | S | | | X | | | | | | | | | | | | |
| 4 | NWW#A @12" | | | 3-30-21 | 1315 | 1 | X | | | | | | | | S | | | X | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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**Special Instructions:**

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| Matt Green | 4/5/21 | 16:34 | | | |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: Jessa Bledsoe | 4/5/21 | 16:34 |

**Laboratory Comments:**

| | | |
|---|---|---|
| Sample Containers Intact? | Y | N |
| VOCs Free of Headspace? | Y | N |
| Custody seals on container(s) | Y | N |
| Custody seals on cooler(s) | Y | N |
| Sample Hand Delivered | Y | N |
| Sar by Sampler/Client Rep. ? | Y | N |

Sar by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 4.1 5.1 °C

**PERMIAN BASIN**
**ENVIRONMENTAL LAB, LP**
**1400 Rankin Hwy**
**Midland, TX 79701**

PBELAB

# Analytical Report

**Prepared for:**

Matt Green

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100

Odessa, TX 79765

Project: Juice Bud State Com 502 A Wellhead

Project Number: 13717

Location: Lea County, NM

Lab Order Number: 1E11005

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 05/20/21

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| Comp-1 | 1E11005-01 | Soil | 05/10/21 12:30 | 05-11-2021 16:33 |
| Comp-2 | 1E11005-02 | Soil | 05/10/21 12:35 | 05-11-2021 16:33 |
| Comp-3 | 1E11005-03 | Soil | 05/10/21 12:40 | 05-11-2021 16:33 |
| WW-1 @ 1' | 1E11005-04 | Soil | 05/10/21 12:45 | 05-11-2021 16:33 |
| WW-2 @ 1' | 1E11005-05 | Soil | 05/10/21 12:50 | 05-11-2021 16:33 |

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| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

## Comp-1

**1E11005-01 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| Benzene | ND | 0.00103 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 03:43 | EPA 8021B | |
| Toluene | ND | 0.00103 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 03:43 | EPA 8021B | |
| Ethylbenzene | ND | 0.00103 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 03:43 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00206 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 03:43 | EPA 8021B | |
| Xylene (o) | ND | 0.00103 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 03:43 | EPA 8021B | |
| *Surrogate: 4-Bromofluorobenzene* | | *101 %* | *80-120* | | *P1E1213* | *05/12/21 16:52* | *05/13/21 03:43* | *EPA 8021B* | |
| *Surrogate: 1,4-Difluorobenzene* | | *105 %* | *80-120* | | *P1E1213* | *05/12/21 16:52* | *05/13/21 03:43* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **85.9** | 1.03 | mg/kg dry | 1 | P1E1809 | 05/18/21 10:37 | 05/19/21 07:11 | EPA 300.0 | |
| **% Moisture** | **3.0** | 0.1 | % | 1 | P1E1302 | 05/13/21 09:01 | 05/13/21 09:52 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 25.8 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 02:53 | TPH 8015M | |
| **>C12-C28** | **32.7** | 25.8 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 02:53 | TPH 8015M | |
| >C28-C35 | ND | 25.8 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 02:53 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *95.4 %* | *70-130* | | *P1E1210* | *05/12/21 15:54* | *05/14/21 02:53* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *96.5 %* | *70-130* | | *P1E1210* | *05/12/21 15:54* | *05/14/21 02:53* | *TPH 8015M* | |
| **Total Petroleum Hydrocarbon C6-C35** | **32.7** | 25.8 | mg/kg dry | 1 | [CALC] | 05/12/21 15:54 | 05/14/21 02:53 | calc | |

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|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

## Comp-2

**1E11005-02 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| Benzene | ND | 0.00112 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:04 | EPA 8021B | |
| Toluene | ND | 0.00112 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:04 | EPA 8021B | |
| Ethylbenzene | ND | 0.00112 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:04 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00225 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:04 | EPA 8021B | |
| Xylene (o) | ND | 0.00112 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:04 | EPA 8021B | |
| *Surrogate: 4-Bromofluorobenzene* | | *101 %* | *80-120* | | *P1E1213* | *05/12/21 16:52* | *05/13/21 04:04* | *EPA 8021B* | |
| *Surrogate: 1,4-Difluorobenzene* | | *108 %* | *80-120* | | *P1E1213* | *05/12/21 16:52* | *05/13/21 04:04* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **113** | 1.12 | mg/kg dry | 1 | P1E1809 | 05/18/21 10:37 | 05/19/21 07:57 | EPA 300.0 | |
| **% Moisture** | **11.0** | 0.1 | % | 1 | P1E1302 | 05/13/21 09:01 | 05/13/21 09:52 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 28.1 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 03:16 | TPH 8015M | |
| **>C12-C28** | **291** | 28.1 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 03:16 | TPH 8015M | |
| **>C28-C35** | **38.9** | 28.1 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 03:16 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *98.4 %* | *70-130* | | *P1E1210* | *05/12/21 15:54* | *05/14/21 03:16* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *101 %* | *70-130* | | *P1E1210* | *05/12/21 15:54* | *05/14/21 03:16* | *TPH 8015M* | |
| **Total Petroleum Hydrocarbon C6-C35** | **330** | 28.1 | mg/kg dry | 1 | [CALC] | 05/12/21 15:54 | 05/14/21 03:16 | calc | |

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|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

## Comp-3

**1E11005-03 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| Benzene | ND | 0.00120 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:24 | EPA 8021B | |
| Toluene | ND | 0.00120 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:24 | EPA 8021B | |
| Ethylbenzene | ND | 0.00120 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:24 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00241 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:24 | EPA 8021B | |
| Xylene (o) | ND | 0.00120 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:24 | EPA 8021B | |
| *Surrogate: 1,4-Difluorobenzene* | | *106 %* | *80-120* | | *P1E1213* | *05/12/21 16:52* | *05/13/21 04:24* | *EPA 8021B* | |
| *Surrogate: 4-Bromofluorobenzene* | | *107 %* | *80-120* | | *P1E1213* | *05/12/21 16:52* | *05/13/21 04:24* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **55.6** | 1.20 | mg/kg dry | 1 | P1E1809 | 05/18/21 10:37 | 05/19/21 13:31 | EPA 300.0 | |
| **% Moisture** | **17.0** | 0.1 | % | 1 | P1E1302 | 05/13/21 09:01 | 05/13/21 09:52 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 30.1 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 03:40 | TPH 8015M | |
| **>C12-C28** | **35.0** | 30.1 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 03:40 | TPH 8015M | |
| >C28-C35 | ND | 30.1 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 03:40 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *96.8 %* | *70-130* | | *P1E1210* | *05/12/21 15:54* | *05/14/21 03:40* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *99.8 %* | *70-130* | | *P1E1210* | *05/12/21 15:54* | *05/14/21 03:40* | *TPH 8015M* | |
| **Total Petroleum Hydrocarbon C6-C35** | **35.0** | 30.1 | mg/kg dry | 1 | [CALC] | 05/12/21 15:54 | 05/14/21 03:40 | calc | |

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|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

## WW-1 @ 1'

**1E11005-04 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| Benzene | ND | 0.00111 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:45 | EPA 8021B | |
| Toluene | ND | 0.00111 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:45 | EPA 8021B | |
| Ethylbenzene | ND | 0.00111 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:45 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00222 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:45 | EPA 8021B | |
| Xylene (o) | ND | 0.00111 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 04:45 | EPA 8021B | |
| *Surrogate: 1,4-Difluorobenzene* | | *106 %* | *80-120* | | *P1E1213* | *05/12/21 16:52* | *05/13/21 04:45* | *EPA 8021B* | |
| *Surrogate: 4-Bromofluorobenzene* | | *102 %* | *80-120* | | *P1E1213* | *05/12/21 16:52* | *05/13/21 04:45* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **151** | 1.11 | mg/kg dry | 1 | P1E1809 | 05/18/21 10:37 | 05/19/21 13:46 | EPA 300.0 | |
| **% Moisture** | **10.0** | 0.1 | % | 1 | P1E1302 | 05/13/21 09:01 | 05/13/21 09:52 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 27.8 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 04:03 | TPH 8015M | |
| **>C12-C28** | **51.8** | 27.8 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 04:03 | TPH 8015M | |
| >C28-C35 | ND | 27.8 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 04:03 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *96.4 %* | *70-130* | | *P1E1210* | *05/12/21 15:54* | *05/14/21 04:03* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *98.7 %* | *70-130* | | *P1E1210* | *05/12/21 15:54* | *05/14/21 04:03* | *TPH 8015M* | |
| **Total Petroleum Hydrocarbon C6-C35** | **51.8** | 27.8 | mg/kg dry | 1 | [CALC] | 05/12/21 15:54 | 05/14/21 04:03 | calc | |

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|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

## WW-2 @ 1'

**1E11005-05 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **BTEX by 8021B** | | | | | | | | | |
| Benzene | ND | 0.00106 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 05:06 | EPA 8021B | |
| Toluene | ND | 0.00106 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 05:06 | EPA 8021B | |
| Ethylbenzene | ND | 0.00106 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 05:06 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00213 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 05:06 | EPA 8021B | |
| Xylene (o) | ND | 0.00106 | mg/kg dry | 1 | P1E1213 | 05/12/21 16:52 | 05/13/21 05:06 | EPA 8021B | |
| *Surrogate: 4-Bromofluorobenzene* | | *99.5 %* | *80-120* | | *P1E1213* | *05/12/21 16:52* | *05/13/21 05:06* | *EPA 8021B* | |
| *Surrogate: 1,4-Difluorobenzene* | | *105 %* | *80-120* | | *P1E1213* | *05/12/21 16:52* | *05/13/21 05:06* | *EPA 8021B* | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **Chloride** | **437** | 1.06 | mg/kg dry | 1 | P1E1809 | 05/18/21 10:37 | 05/19/21 14:01 | EPA 300.0 | |
| **% Moisture** | **6.0** | 0.1 | % | 1 | P1E1302 | 05/13/21 09:01 | 05/13/21 09:52 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 26.6 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 04:27 | TPH 8015M | |
| **>C12-C28** | **147** | 26.6 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 04:27 | TPH 8015M | |
| >C28-C35 | ND | 26.6 | mg/kg dry | 1 | P1E1210 | 05/12/21 15:54 | 05/14/21 04:27 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *94.9 %* | *70-130* | | *P1E1210* | *05/12/21 15:54* | *05/14/21 04:27* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *97.5 %* | *70-130* | | *P1E1210* | *05/12/21 15:54* | *05/14/21 04:27* | *TPH 8015M* | |
| **Total Petroleum Hydrocarbon C6-C35** | **147** | 26.6 | mg/kg dry | 1 | [CALC] | 05/12/21 15:54 | 05/14/21 04:27 | calc | |

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|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

## BTEX by 8021B - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1E1213 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Blank (P1E1213-BLK1)** | | | | Prepared & Analyzed: 05/12/21 | | | | | | |
| Benzene | ND | 0.00100 | mg/kg wet | | | | | | | |
| Toluene | ND | 0.00100 | " | | | | | | | |
| Ethylbenzene | ND | 0.00100 | " | | | | | | | |
| Xylene (p/m) | ND | 0.00200 | " | | | | | | | |
| Xylene (o) | ND | 0.00100 | " | | | | | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.120* | | *"* | *0.120* | | *99.9* | *80-120* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.118* | | *"* | *0.120* | | *98.1* | *80-120* | | | |
| **LCS (P1E1213-BS1)** | | | | Prepared & Analyzed: 05/12/21 | | | | | | |
| Benzene | 0.100 | 0.00100 | mg/kg wet | 0.100 | | 100 | 70-130 | | | |
| Toluene | 0.0986 | 0.00100 | " | 0.100 | | 98.6 | 70-130 | | | |
| Ethylbenzene | 0.0934 | 0.00100 | " | 0.100 | | 93.4 | 70-130 | | | |
| Xylene (p/m) | 0.205 | 0.00200 | " | 0.200 | | 103 | 70-130 | | | |
| Xylene (o) | 0.0944 | 0.00100 | " | 0.100 | | 94.4 | 70-130 | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.123* | | *"* | *0.120* | | *102* | *80-120* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.123* | | *"* | *0.120* | | *102* | *80-120* | | | |
| **LCS Dup (P1E1213-BSD1)** | | | | Prepared & Analyzed: 05/12/21 | | | | | | |
| Benzene | 0.104 | 0.00100 | mg/kg wet | 0.100 | | 104 | 70-130 | 3.27 | 20 | |
| Toluene | 0.102 | 0.00100 | " | 0.100 | | 102 | 70-130 | 3.31 | 20 | |
| Ethylbenzene | 0.0956 | 0.00100 | " | 0.100 | | 95.6 | 70-130 | 2.34 | 20 | |
| Xylene (p/m) | 0.210 | 0.00200 | " | 0.200 | | 105 | 70-130 | 2.53 | 20 | |
| Xylene (o) | 0.0968 | 0.00100 | " | 0.100 | | 96.8 | 70-130 | 2.54 | 20 | |
| *Surrogate: 4-Bromofluorobenzene* | *0.125* | | *"* | *0.120* | | *104* | *80-120* | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.125* | | *"* | *0.120* | | *104* | *80-120* | | | |
| **Calibration Blank (P1E1213-CCB2)** | | | | Prepared: 05/12/21 Analyzed: 05/13/21 | | | | | | |
| Benzene | 0.00 | | mg/kg wet | | | | | | | |
| Toluene | 0.00 | | " | | | | | | | |
| Ethylbenzene | 0.00 | | " | | | | | | | |
| Xylene (p/m) | 0.00 | | " | | | | | | | |
| Xylene (o) | 0.00 | | " | | | | | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.121* | | *"* | *0.120* | | *101* | *80-120* | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.125* | | *"* | *0.120* | | *104* | *80-120* | | | |

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| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
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| Odessa TX, 79765 | Project Manager: Matt Green |

## BTEX by 8021B - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1E1213 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Calibration Check (P1E1213-CCV2)** | | | | Prepared: 05/12/21 Analyzed: 05/13/21 | | | | | | |
| Benzene | 0.0890 | 0.00100 | mg/kg wet | 0.100 | | 89.0 | 80-120 | | | |
| Toluene | 0.0820 | 0.00100 | " | 0.100 | | 82.0 | 80-120 | | | |
| Ethylbenzene | 0.0810 | 0.00100 | " | 0.100 | | 81.0 | 80-120 | | | |
| Xylene (p/m) | 0.163 | 0.00200 | " | 0.200 | | 81.6 | 80-120 | | | |
| Xylene (o) | 0.0805 | 0.00100 | " | 0.100 | | 80.5 | 80-120 | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.122* | | *"* | *0.120* | | *102* | *75-125* | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.126* | | *"* | *0.120* | | *105* | *75-125* | | | |
| **Calibration Check (P1E1213-CCV3)** | | | | Prepared: 05/12/21 Analyzed: 05/13/21 | | | | | | |
| Benzene | 0.0958 | 0.00100 | mg/kg wet | 0.100 | | 95.8 | 80-120 | | | |
| Toluene | 0.0911 | 0.00100 | " | 0.100 | | 91.1 | 80-120 | | | |
| Ethylbenzene | 0.0872 | 0.00100 | " | 0.100 | | 87.2 | 80-120 | | | |
| Xylene (p/m) | 0.184 | 0.00200 | " | 0.200 | | 91.9 | 80-120 | | | |
| Xylene (o) | 0.0902 | 0.00100 | " | 0.100 | | 90.2 | 80-120 | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.128* | | *"* | *0.120* | | *106* | *75-125* | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.128* | | *"* | *0.120* | | *106* | *75-125* | | | |
| **Matrix Spike (P1E1213-MS1)** | | **Source: 1E06004-01** | | Prepared: 05/12/21 Analyzed: 05/13/21 | | | | | | |
| Benzene | 0.0805 | 0.00108 | mg/kg dry | 0.108 | ND | 74.8 | 80-120 | | | QM-07 |
| Toluene | 0.0722 | 0.00108 | " | 0.108 | ND | 67.2 | 80-120 | | | QM-07 |
| Ethylbenzene | 0.0631 | 0.00108 | " | 0.108 | ND | 58.7 | 80-120 | | | QM-07 |
| Xylene (p/m) | 0.134 | 0.00215 | " | 0.215 | ND | 62.3 | 80-120 | | | QM-07 |
| Xylene (o) | 0.0667 | 0.00108 | " | 0.108 | ND | 62.0 | 80-120 | | | QM-07 |
| *Surrogate: 1,4-Difluorobenzene* | *0.139* | | *"* | *0.129* | | *108* | *80-120* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *0.140* | | *"* | *0.129* | | *109* | *80-120* | | | |
| **Matrix Spike Dup (P1E1213-MSD1)** | | **Source: 1E06004-01** | | Prepared: 05/12/21 Analyzed: 05/13/21 | | | | | | |
| Benzene | 0.0782 | 0.00108 | mg/kg dry | 0.108 | ND | 72.7 | 80-120 | 2.87 | 20 | |
| Toluene | 0.0706 | 0.00108 | " | 0.108 | ND | 65.7 | 80-120 | 2.24 | 20 | |
| Ethylbenzene | 0.0618 | 0.00108 | " | 0.108 | ND | 57.5 | 80-120 | 2.10 | 20 | |
| Xylene (p/m) | 0.132 | 0.00215 | " | 0.215 | ND | 61.4 | 80-120 | 1.48 | 20 | |
| Xylene (o) | 0.0655 | 0.00108 | " | 0.108 | ND | 60.9 | 80-120 | 1.85 | 20 | |
| *Surrogate: 4-Bromofluorobenzene* | *0.143* | | *"* | *0.129* | | *111* | *80-120* | | | |
| *Surrogate: 1,4-Difluorobenzene* | *0.141* | | *"* | *0.129* | | *110* | *80-120* | | | |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

## General Chemistry Parameters by EPA / Standard Methods - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1E1302 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Blank (P1E1302-BLK1)** | | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| **Blank (P1E1302-BLK2)** | | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| **Duplicate (P1E1302-DUP1)** | **Source: 1E11002-20** | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | 7.0 | 0.1 | % | | 7.0 | | | 0.00 | 20 | |
| **Duplicate (P1E1302-DUP2)** | **Source: 1E11002-30** | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | 9.0 | 0.1 | % | | 9.0 | | | 0.00 | 20 | |
| **Duplicate (P1E1302-DUP3)** | **Source: 1E11002-45** | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | 9.0 | 0.1 | % | | 9.0 | | | 0.00 | 20 | |
| **Duplicate (P1E1302-DUP4)** | **Source: 1E11002-55** | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | 7.0 | 0.1 | % | | 7.0 | | | 0.00 | 20 | |
| **Duplicate (P1E1302-DUP5)** | **Source: 1E12001-03** | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | ND | 0.1 | % | | ND | | | | 20 | |
| **Duplicate (P1E1302-DUP6)** | **Source: 1E12001-13** | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | 2.0 | 0.1 | % | | 2.0 | | | 0.00 | 20 | |
| **Duplicate (P1E1302-DUP7)** | **Source: 1E12002-03** | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | 4.0 | 0.1 | % | | 4.0 | | | 0.00 | 20 | |
| **Duplicate (P1E1302-DUP8)** | **Source: 1E12003-06** | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | 9.0 | 0.1 | % | | 10.0 | | | 10.5 | 20 | |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

## General Chemistry Parameters by EPA / Standard Methods - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1E1302 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Duplicate (P1E1302-DUP9)** | **Source: 1E12007-02** | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | 16.0 | 0.1 | % | | 17.0 | | | 6.06 | 20 | |
| **Duplicate (P1E1302-DUPA)** | **Source: 1E12007-12** | | | Prepared & Analyzed: 05/13/21 | | | | | | |
| % Moisture | 16.0 | 0.1 | % | | 15.0 | | | 6.45 | 20 | |
| **Batch P1E1809 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Blank (P1E1809-BLK1)** | | | | Prepared & Analyzed: 05/18/21 | | | | | | |
| Chloride | ND | 1.00 | mg/kg wet | | | | | | | |
| **LCS (P1E1809-BS1)** | | | | Prepared: 05/18/21 Analyzed: 05/19/21 | | | | | | |
| Chloride | 418 | 1.00 | mg/kg wet | 400 | | 104 | 90-110 | | | |
| **LCS Dup (P1E1809-BSD1)** | | | | Prepared & Analyzed: 05/18/21 | | | | | | |
| Chloride | 403 | 1.00 | mg/kg wet | 400 | | 101 | 90-110 | 3.48 | 20 | |
| **Calibration Check (P1E1809-CCV1)** | | | | Prepared: 05/18/21 Analyzed: 05/19/21 | | | | | | |
| Chloride | 21.3 | | mg/kg | 20.0 | | 107 | 90-110 | | | |
| **Calibration Check (P1E1809-CCV2)** | | | | Prepared: 05/18/21 Analyzed: 05/19/21 | | | | | | |
| Chloride | 21.3 | | mg/kg | 20.0 | | 107 | 90-110 | | | |
| **Calibration Check (P1E1809-CCV3)** | | | | Prepared: 05/18/21 Analyzed: 05/19/21 | | | | | | |
| Chloride | 20.5 | | mg/kg | 20.0 | | 102 | 90-110 | | | |
| **Matrix Spike (P1E1809-MS1)** | **Source: 1E18020-21** | | | Prepared & Analyzed: 05/18/21 | | | | | | |
| Chloride | 26200 | 54.3 | mg/kg dry | 5430 | 20000 | 114 | 80-120 | | | |

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|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

## General Chemistry Parameters by EPA / Standard Methods - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1E1809 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Matrix Spike (P1E1809-MS2)** | **Source: 1E11005-01** | | | Prepared: 05/18/21 Analyzed: 05/19/21 | | | | | | |
| Chloride | 556 | 1.03 | mg/kg dry | 515 | 85.9 | 91.1 | 80-120 | | | |
| **Matrix Spike Dup (P1E1809-MSD1)** | **Source: 1E18020-21** | | | Prepared: 05/18/21 Analyzed: 05/19/21 | | | | | | |
| Chloride | 26600 | 54.3 | mg/kg dry | 5430 | 20000 | 123 | 80-120 | 1.82 | 20 | QM-05 |
| **Matrix Spike Dup (P1E1809-MSD2)** | **Source: 1E11005-01** | | | Prepared: 05/18/21 Analyzed: 05/19/21 | | | | | | |
| Chloride | 534 | 1.03 | mg/kg dry | 515 | 85.9 | 86.9 | 80-120 | 4.05 | 20 | |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

## Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1E1210 - TX 1005** | | | | | | | | | | |
| **Blank (P1E1210-BLK1)** | | | | Prepared: 05/12/21 Analyzed: 05/13/21 | | | | | | |
| C6-C12 | ND | 25.0 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.0 | " | | | | | | | |
| >C28-C35 | ND | 25.0 | " | | | | | | | |
| *Surrogate: 1-Chlorooctane* | *95.5* | | *"* | *100* | | *95.5* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *48.3* | | *"* | *50.0* | | *96.5* | *70-130* | | | |
| **LCS (P1E1210-BS1)** | | | | Prepared: 05/12/21 Analyzed: 05/13/21 | | | | | | |
| C6-C12 | 977 | 25.0 | mg/kg wet | 1000 | | 97.7 | 75-125 | | | |
| >C12-C28 | 839 | 25.0 | " | 1000 | | 83.9 | 75-125 | | | |
| *Surrogate: 1-Chlorooctane* | *97.7* | | *"* | *100* | | *97.7* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *52.3* | | *"* | *50.0* | | *105* | *70-130* | | | |
| **LCS Dup (P1E1210-BSD1)** | | | | Prepared: 05/12/21 Analyzed: 05/13/21 | | | | | | |
| C6-C12 | 982 | 25.0 | mg/kg wet | 1000 | | 98.2 | 75-125 | 0.509 | 20 | |
| >C12-C28 | 853 | 25.0 | " | 1000 | | 85.3 | 75-125 | 1.69 | 20 | |
| *Surrogate: 1-Chlorooctane* | *99.8* | | *"* | *100* | | *99.8* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *49.6* | | *"* | *50.0* | | *99.2* | *70-130* | | | |
| **Calibration Check (P1E1210-CCV1)** | | | | Prepared: 05/12/21 Analyzed: 05/13/21 | | | | | | |
| C6-C12 | 493 | 25.0 | mg/kg wet | 500 | | 98.5 | 85-115 | | | |
| >C12-C28 | 461 | 25.0 | " | 500 | | 92.2 | 85-115 | | | |
| *Surrogate: 1-Chlorooctane* | *111* | | *"* | *100* | | *111* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *49.2* | | *"* | *50.0* | | *98.5* | *70-130* | | | |
| **Calibration Check (P1E1210-CCV2)** | | | | Prepared: 05/12/21 Analyzed: 05/14/21 | | | | | | |
| C6-C12 | 465 | 25.0 | mg/kg wet | 500 | | 92.9 | 85-115 | | | |
| >C12-C28 | 449 | 25.0 | " | 500 | | 89.8 | 85-115 | | | |
| *Surrogate: 1-Chlorooctane* | *110* | | *"* | *100* | | *110* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *48.2* | | *"* | *50.0* | | *96.5* | *70-130* | | | |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

## Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1E1210 - TX 1005** | | | | | | | | | | |
| **Calibration Check (P1E1210-CCV3)** | | | | Prepared: 05/12/21 Analyzed: 05/14/21 | | | | | | |
| C6-C12 | 453 | 25.0 | mg/kg wet | 500 | | 90.5 | 85-115 | | | |
| >C12-C28 | 435 | 25.0 | " | 500 | | 86.9 | 85-115 | | | |
| *Surrogate: 1-Chlorooctane* | *106* | | *"* | *100* | | *106* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *46.5* | | *"* | *50.0* | | *92.9* | *70-130* | | | |
| **Matrix Spike (P1E1210-MS1)** | | **Source: 1E12001-01** | | Prepared: 05/12/21 Analyzed: 05/14/21 | | | | | | |
| C6-C12 | 874 | 25.0 | mg/kg dry | 1000 | 11.2 | 86.3 | 75-125 | | | |
| >C12-C28 | 1640 | 25.0 | " | 1000 | 1050 | 58.6 | 75-125 | | | QM-05 |
| *Surrogate: 1-Chlorooctane* | *126* | | *"* | *100* | | *126* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *44.4* | | *"* | *50.0* | | *88.7* | *70-130* | | | |
| **Matrix Spike Dup (P1E1210-MSD1)** | | **Source: 1E12001-01** | | Prepared: 05/12/21 Analyzed: 05/14/21 | | | | | | |
| C6-C12 | 806 | 25.0 | mg/kg dry | 1000 | 11.2 | 79.5 | 75-125 | 8.18 | 20 | |
| >C12-C28 | 1490 | 25.0 | " | 1000 | 1050 | 43.3 | 75-125 | 29.9 | 20 | QM-05 |
| *Surrogate: 1-Chlorooctane* | *115* | | *"* | *100* | | *115* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *51.0* | | *"* | *50.0* | | *102* | *70-130* | | | |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

**Notes and Definitions**

| | |
|---|---|
| ROI | Received on Ice |
| QM-07 | The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery. |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| BULK | Samples received in Bulk soil containers |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| LCS | Laboratory Control Spike |
| MS | Matrix Spike |
| Dup | Duplicate |

Report Approved By: Brent Barron Date: 5/20/2021

Brent Barron, Laboratory Director/Technical Director

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Matt Green |

**PBELAB**

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Project Manager: Matt Green

Company Name: Etech Environmental and Safety Solutions, Inc.

Company Address: 13000 W CR 100

City/State/Zip: Odessa, Texas 79765

Telephone No: (432)230-3763 Fax No:

Sampler Signature: Matt Green e-mail: Matt@etechenv.com tim@etechenv.com

Project Name: Centennial Juice Bud State COM 502H Wellhead

Project #: 13717

Project Loc: Lea County, NM

PO #: Centennial Resource

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)

ORDER #: E11005

| LAB # (lab use only) | FIELD CODE | Beginning Depth | Ending Depth | Date Sampled | Time Sampled | Field Filtered | Total #. of Containers | Preservation & # of Containers: Ice | HNO3 | HCl | H2SO4 | NaOH | Na2S2O3 | None | Other (Specify) | Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other | Analyze For: TCLP: TPH: 8015M | TOTAL: TPH: 418.1 | TPH: TX 1005 Ext. | TX 1006 | Cations (Ca, Mg, Na, K) | Anions (Cl, SO4, Alkalinity) | SAR / ESP / CEC | Metals: As Ag Ba Cd Cr Pb Hg Se | Volatiles | Semivolatiles | BTEX 8021B/5030 or BTEX 8260 | RCI | N.O.R.M. | Chlorides E 300 | | | RUSH TAT (Pre-Schedule) 24, 48, 72 hrs | Standard TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | COMP-1 | | | 5/10/2021 | 1230 | | 1 | x | | | | | | | | S | X | | | | | | | | | X | | | X | | | | X |
| 2 | COMP-2 | | | 5/10/2021 | 1235 | | 1 | x | | | | | | | | S | X | | | | | | | | | X | | | X | | | | X |
| 3 | COMP-3 | | | 5/10/2021 | 1240 | | 1 | x | | | | | | | | S | X | | | | | | | | | X | | | X | | | | X |
| 4 | WW-1 @ 1' | | | 5/10/2021 | 1245 | | 1 | x | | | | | | | | S | X | | | | | | | | | X | | | X | | | | X |
| 5 | WW-2 @ 1' | | | 5/10/2021 | 1250 | | 1 | x | | | | | | | | S | X | | | | | | | | | X | | | X | | | | X |

**Special Instructions:**

Bill to Centennial Resource

| | | | | | |
|---|---|---|---|---|---|
| Relinquished by: Matt Green | Date 5-11-21 | Time 1633 | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by PBEL: | Date 5-11-21 | Time 1633 |

**Laboratory Comments:**

| | | |
|---|---|---|
| Sample Containers Intact? | Y | N |
| VOCs Free of Headspace? | Y | N |
| Labels on container(s) | Y | N |
| Custody seals on container(s) | Y | N |
| Custody seals on cooler(s) | Y | N |
| Sample Hand Delivered | Y | N |
| by Sampler/Client Rep. ? | Y | N |

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt:

Received: °C

Adjusted: °C Factor

7.0 7.1 3.0 CF

**PERMIAN BASIN**
**ENVIRONMENTAL LAB, LP**
**1400 Rankin Hwy**
**Midland, TX 79701**

PBELAB

# Analytical Report

**Prepared for:**

Tim McMinn

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100

Odessa, TX 79765

Project: Juice Bud State Com 502 A Wellhead

Project Number: 13717

Location: Lea County, NM

Lab Order Number: 1E28016

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 06/07/21

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Tim McMinn |

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| Comp-2 | 1E28016-01 | Soil | 05/21/21 14:30 | 05-28-2021 11:02 |
| WW-1 | 1E28016-02 | Soil | 05/21/21 13:15 | 05-28-2021 11:02 |
| WW-2 | 1E28016-03 | Soil | 05/21/21 13:20 | 05-28-2021 11:02 |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Tim McMinn |

## Comp-2

**1E28016-01 (Soil)**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **Permian Basin Environmental Lab, L.P.** | | | | | | | | | |
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **% Moisture** | **20.0** | 0.1 | % | 1 | P1F0203 | 06/02/21 08:28 | 06/02/21 09:05 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 31.2 | mg/kg dry | 1 | P1F0206 | 06/02/21 10:30 | 06/04/21 23:19 | TPH 8015M | |
| **>C12-C28** | **42.2** | 31.2 | mg/kg dry | 1 | P1F0206 | 06/02/21 10:30 | 06/04/21 23:19 | TPH 8015M | |
| >C28-C35 | ND | 31.2 | mg/kg dry | 1 | P1F0206 | 06/02/21 10:30 | 06/04/21 23:19 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *115 %* | *70-130* | | *P1F0206* | *06/02/21 10:30* | *06/04/21 23:19* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *127 %* | *70-130* | | *P1F0206* | *06/02/21 10:30* | *06/04/21 23:19* | *TPH 8015M* | |
| **Total Petroleum Hydrocarbon C6-C35** | **42.2** | 31.2 | mg/kg dry | 1 | [CALC] | 06/02/21 10:30 | 06/04/21 23:19 | calc | |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Tim McMinn |

**WW-1**

**1E28016-02 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **% Moisture** | **11.0** | 0.1 | % | 1 | P1F0203 | 06/02/21 08:28 | 06/02/21 09:05 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 28.1 | mg/kg dry | 1 | P1F0206 | 06/02/21 10:30 | 06/04/21 23:41 | TPH 8015M | |
| >C12-C28 | ND | 28.1 | mg/kg dry | 1 | P1F0206 | 06/02/21 10:30 | 06/04/21 23:41 | TPH 8015M | |
| >C28-C35 | ND | 28.1 | mg/kg dry | 1 | P1F0206 | 06/02/21 10:30 | 06/04/21 23:41 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *109 %* | *70-130* | | *P1F0206* | *06/02/21 10:30* | *06/04/21 23:41* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *121 %* | *70-130* | | *P1F0206* | *06/02/21 10:30* | *06/04/21 23:41* | *TPH 8015M* | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 28.1 | mg/kg dry | 1 | [CALC] | 06/02/21 10:30 | 06/04/21 23:41 | calc | |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Tim McMinn |

**WW-2**

**1E28016-03 (Soil)**

**Permian Basin Environmental Lab, L.P.**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry Parameters by EPA / Standard Methods** | | | | | | | | | |
| **% Moisture** | **13.0** | 0.1 | % | 1 | P1F0203 | 06/02/21 08:28 | 06/02/21 09:05 | ASTM D2216 | |
| **Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M** | | | | | | | | | |
| C6-C12 | ND | 28.7 | mg/kg dry | 1 | P1F0206 | 06/02/21 10:30 | 06/05/21 00:03 | TPH 8015M | |
| >C12-C28 | ND | 28.7 | mg/kg dry | 1 | P1F0206 | 06/02/21 10:30 | 06/05/21 00:03 | TPH 8015M | |
| >C28-C35 | ND | 28.7 | mg/kg dry | 1 | P1F0206 | 06/02/21 10:30 | 06/05/21 00:03 | TPH 8015M | |
| *Surrogate: 1-Chlorooctane* | | *104 %* | *70-130* | | *P1F0206* | *06/02/21 10:30* | *06/05/21 00:03* | *TPH 8015M* | |
| *Surrogate: o-Terphenyl* | | *115 %* | *70-130* | | *P1F0206* | *06/02/21 10:30* | *06/05/21 00:03* | *TPH 8015M* | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 28.7 | mg/kg dry | 1 | [CALC] | 06/02/21 10:30 | 06/05/21 00:03 | calc | |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Tim McMinn |

## General Chemistry Parameters by EPA / Standard Methods - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1F0203 - *** DEFAULT PREP *** ** | | | | | | | | | | |
| **Blank (P1F0203-BLK1)** | | | | Prepared & Analyzed: 06/02/21 | | | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| **Duplicate (P1F0203-DUP1)** | | **Source: 1E28002-10** | | Prepared & Analyzed: 06/02/21 | | | | | | |
| % Moisture | 7.0 | 0.1 | % | | 7.0 | | | 0.00 | 20 | |
| **Duplicate (P1F0203-DUP2)** | | **Source: 1E28005-03** | | Prepared & Analyzed: 06/02/21 | | | | | | |
| % Moisture | 9.0 | 0.1 | % | | 10.0 | | | 10.5 | 20 | |
| **Duplicate (P1F0203-DUP3)** | | **Source: 1E28008-01** | | Prepared & Analyzed: 06/02/21 | | | | | | |
| % Moisture | 9.0 | 0.1 | % | | 11.0 | | | 20.0 | 20 | |
| **Duplicate (P1F0203-DUP4)** | | **Source: 1E28010-01** | | Prepared & Analyzed: 06/02/21 | | | | | | |
| % Moisture | 9.0 | 0.1 | % | | 9.0 | | | 0.00 | 20 | |
| **Duplicate (P1F0203-DUP5)** | | **Source: 1E28014-02** | | Prepared & Analyzed: 06/02/21 | | | | | | |
| % Moisture | 14.0 | 0.1 | % | | 14.0 | | | 0.00 | 20 | |
| **Duplicate (P1F0203-DUP6)** | | **Source: 1E28015-03** | | Prepared & Analyzed: 06/02/21 | | | | | | |
| % Moisture | 13.0 | 0.1 | % | | 12.0 | | | 8.00 | 20 | |
| **Duplicate (P1F0203-DUP7)** | | **Source: 1E28020-03** | | Prepared & Analyzed: 06/02/21 | | | | | | |
| % Moisture | 12.0 | 0.1 | % | | 12.0 | | | 0.00 | 20 | |
| **Duplicate (P1F0203-DUP8)** | | **Source: 1F01008-01** | | Prepared & Analyzed: 06/02/21 | | | | | | |
| % Moisture | 8.0 | 0.1 | % | | 7.0 | | | 13.3 | 20 | |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Tim McMinn |

## Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1F0206 - TX 1005** | | | | | | | | | | |
| **Blank (P1F0206-BLK1)** | | | | Prepared: 06/02/21 Analyzed: 06/04/21 | | | | | | |
| C6-C12 | ND | 25.0 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.0 | " | | | | | | | |
| >C28-C35 | ND | 25.0 | " | | | | | | | |
| *Surrogate: 1-Chlorooctane* | *99.3* | | *"* | *100* | | *99.3* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *54.9* | | *"* | *50.0* | | *110* | *70-130* | | | |
| **LCS (P1F0206-BS1)** | | | | Prepared: 06/02/21 Analyzed: 06/04/21 | | | | | | |
| C6-C12 | 1020 | 25.0 | mg/kg wet | 1000 | | 102 | 75-125 | | | |
| >C12-C28 | 923 | 25.0 | " | 1000 | | 92.3 | 75-125 | | | |
| *Surrogate: 1-Chlorooctane* | *103* | | *"* | *100* | | *103* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *56.6* | | *"* | *50.0* | | *113* | *70-130* | | | |
| **LCS Dup (P1F0206-BSD1)** | | | | Prepared: 06/02/21 Analyzed: 06/04/21 | | | | | | |
| C6-C12 | 1050 | 25.0 | mg/kg wet | 1000 | | 105 | 75-125 | 2.26 | 20 | |
| >C12-C28 | 951 | 25.0 | " | 1000 | | 95.1 | 75-125 | 3.00 | 20 | |
| *Surrogate: 1-Chlorooctane* | *105* | | *"* | *100* | | *105* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *56.9* | | *"* | *50.0* | | *114* | *70-130* | | | |
| **Calibration Blank (P1F0206-CCB1)** | | | | Prepared: 06/02/21 Analyzed: 06/04/21 | | | | | | |
| C6-C12 | 9.53 | | mg/kg wet | | | | | | | |
| >C12-C28 | 17.9 | | " | | | | | | | |
| *Surrogate: 1-Chlorooctane* | *94.9* | | *"* | *100* | | *94.9* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *52.2* | | *"* | *50.0* | | *104* | *70-130* | | | |
| **Calibration Check (P1F0206-CCV1)** | | | | Prepared: 06/02/21 Analyzed: 06/04/21 | | | | | | |
| C6-C12 | 534 | 25.0 | mg/kg wet | 500 | | 107 | 85-115 | | | |
| >C12-C28 | 529 | 25.0 | " | 500 | | 106 | 85-115 | | | |
| *Surrogate: 1-Chlorooctane* | *108* | | *"* | *100* | | *108* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *59.6* | | *"* | *50.0* | | *119* | *70-130* | | | |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Tim McMinn |

## Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

## Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch P1F0206 - TX 1005** | | | | | | | | | | |
| **Matrix Spike (P1F0206-MS1)** | **Source: 1E28019-01** | | | Prepared: 06/02/21 Analyzed: 06/05/21 | | | | | | |
| C6-C12 | 1050 | 26.0 | mg/kg dry | 1040 | 15.9 | 99.6 | 75-125 | | | |
| >C12-C28 | 1350 | 26.0 | " | 1040 | 970 | 37.0 | 75-125 | | | QM-05 |
| *Surrogate: 1-Chlorooctane* | *105* | | *"* | *104* | | *101* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *65.3* | | *"* | *52.1* | | *125* | *70-130* | | | |
| **Matrix Spike Dup (P1F0206-MSD1)** | **Source: 1E28019-01** | | | Prepared: 06/02/21 Analyzed: 06/05/21 | | | | | | |
| C6-C12 | 1030 | 26.0 | mg/kg dry | 1040 | 15.9 | 97.2 | 75-125 | 2.46 | 20 | |
| >C12-C28 | 1350 | 26.0 | " | 1040 | 970 | 36.6 | 75-125 | 1.07 | 20 | QM-05 |
| *Surrogate: 1-Chlorooctane* | *102* | | *"* | *104* | | *97.9* | *70-130* | | | |
| *Surrogate: o-Terphenyl* | *61.3* | | *"* | *52.1* | | *118* | *70-130* | | | |

| | |
|---|---|
| E Tech Environmental & Safety Solutions, Inc. [1] | Project: Juice Bud State Com 502 A Wellhead |
| 13000 West County Road 100 | Project Number: 13717 |
| Odessa TX, 79765 | Project Manager: Tim McMinn |

**Notes and Definitions**

| | |
|---|---|
| ROI | Received on Ice |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| BULK | Samples received in Bulk soil containers |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| LCS | Laboratory Control Spike |
| MS | Matrix Spike |
| Dup | Duplicate |

Report Approved By: Brent Barron Date: 6/7/2021

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

**PBELAB**

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706
Phone: 432-661-4184

Centennial

Project Manager: Tim McMinn
Company Name: Etech Environmental and Safety Solutions, Inc.
Company Address: 13000 W CR 100
City/State/Zip: Odessa, Texas 79765
Telephone No: (432)230-3763 Fax No:
Sampler Signature:
e-mail: Matt@etechenv.com; tim@etechenv.com

Project Name: Juice Bird State COM 502H Well
Project #: 13717
Project Loc: Lea County, NM
PO #: 38806
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 1E280116

| LAB # (lab use only) | FIELD CODE | Beginning Depth | Ending Depth | Date Sampled | Time Sampled | Field Filtered | Total #. of Containers | Preservation & # of Containers: Ice | $HNO_3$ | HCl | $H_2SO_4$ | NaOH | $Na_2S_2O_3$ | None | Other (Specify) | Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other | Analyze For: TCLP: TPH: 418.1 | TOTAL: 8015M | 8015B TPH: TX 1005 Ext | TX 1006 | Cations (Ca, Mg, Na, K) | Anions (Cl, SO4, Alkalinity) | SAR / ESP / CEC | Metals: As Ag Ba Cd Cr Pb Hg Se | Volatiles | Semivolatiles | BTEX 8021B/5030 or BTEX 8260 | RCI | N.O.R.M. | Chlorides E 300 | | | RUSH TAT (Pre-Schedule) 24, 48, 72 hrs | Standard TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Comp-2 | | | 5/21/21 | 1430 | | 1 | X | | | | | | | | S | X | | | | | | | | | | | | | | | | | X |
| 2 | WW-1 | | | ↓ | 1315 | | ↓ | ↓ | | | | | | | | ↓ | ↓ | | | | | | | | | | | | | | | | | ↓ |
| 3 | WW-2 | | | ↓ | 1320 | | ↓ | ↓ | | | | | | | | ↓ | ↓ | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Special Instructions:**
Bill to Centennial Resource

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| | 5/28/21 | 11:02 | | | |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by PBEL: Tessa Bledsoe | 5/28/21 | 11:02 |

**Laboratory Comments:**

| | | |
|---|---|---|
| Sample Containers Intact? | Y | N |
| VOCs Free of Headspace? | Y | N |
| Labels on container(s) | Y | N |
| Custody seals on container(s) | Y | N |
| Custody seals on cooler(s) | Y | N |
| Sample Hand Delivered | Y | N |
| by Sampler/Client Rep. ? | Y | N |

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt:
Received: 4.5.1 °C
Adjusted: °C Factor CF+1.2

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

| | |
|---|---|
| Incident ID | nAPP2102628107 |
| District RP | |
| Facility ID | |
| Application ID | |

# Release Notification

## Responsible Party

| | |
|---|---|
| Responsible Party: Centennial Resource Production, Inc | OGRID: 372165 |
| Contact Name: Jamon Hohensee | Contact Telephone: 432-241-4283 |
| Contact email: jamon.hohensee@cdevinc.com | Incident # nAPP2102628107 |
| Contact mailing address: 500 W. Illinois Ave, Suite 500, Midland Texas 79705 | |

## Location of Release Source

Latitude 32.45868 Longitude -103.51118

*(NAD 83 in decimal degrees to 5 decimal places)*

| | |
|---|---|
| Site Name: Juice Bud State Com 502H | Site Type: Production Facility |
| Date Release Discovered: 1/22/21 | API# *(if applicable)* |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| N | 19 | 21S | 34E | Lea |

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

## Nature and Volume of Release

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

| | | |
|---|---|---|
| ☒ Crude Oil | Volume Released (bbls) 3 | Volume Recovered (bbls) |
| ☒ Produced Water | Volume Released (bbls) 3 | Volume Recovered (bbls) |
| | Is the concentration of dissolved chloride in the produced water >10,000 mg/l? | ☐ Yes ☐ No |
| ☐ Condensate | Volume Released (bbls) | Volume Recovered (bbls) |
| ☐ Natural Gas | Volume Released (Mcf) | Volume Recovered (Mcf) |
| ☐ Other (describe) | Volume/Weight Released (provide units) | Volume/Weight Recovered (provide units) |

Cause of Release
2" nipple behind the union on the well head washed out causing fluids to be released to the pad area adjacent to the well head.

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2102628107 |
| District RP | |
| Facility ID | |
| Application ID | |

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

## Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

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

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

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

Printed Name: Jamon Hohensee Title: Sr. Environmental Analyst

Signature: _____ Date: 2/11/21

email: jamon.hohensee@cdevinc.com Telephone: 432-241-4283

**OCD Only**

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2102628107 |
| District RP | |
| Facility ID | |
| Application ID | |

# Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2102628107 |
| District RP | |
| Facility ID | |
| Application ID | |

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

**OCD Only**

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2102628107 |
| District RP | |
| Facility ID | |
| Application ID | |

# Remediation Plan

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

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

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

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

**OCD Only**

Received by: _____ Date: _____

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

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2102628107 |
| District RP | |
| Facility ID | |
| Application ID | |

# Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

**OCD Only**

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2102628107 |
| District RP | |
| Facility ID | |
| Application ID | |

# Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: Jamon Hohensee Title: Sr. Environmental Analyst

Signature: JH Date: 8-10-21

email: jamon.hohensee@cdevinc.com Telephone: 432-241-4283

**OCD Only**

Received by: Robert Hamlet Date: 11/17/2021

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

Closure Approved by: Robert Hamlet Date: 11/17/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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

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

CONDITIONS

Action 41032

## CONDITIONS

| | |
|---|---|
| Operator:<br>CENTENNIAL RESOURCE PRODUCTION, LLC<br>1001 17th Street, Suite 1800<br>Denver, CO 80202 | OGRID:<br>372165 |
| | Action Number:<br>41032 |
| | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| rhamlet | We have received your closure report and final C-141 for Incident #NAPP2102628107 JUICE BUD STATE COM 502H, thank you. This closure is approved. | 11/17/2021 |