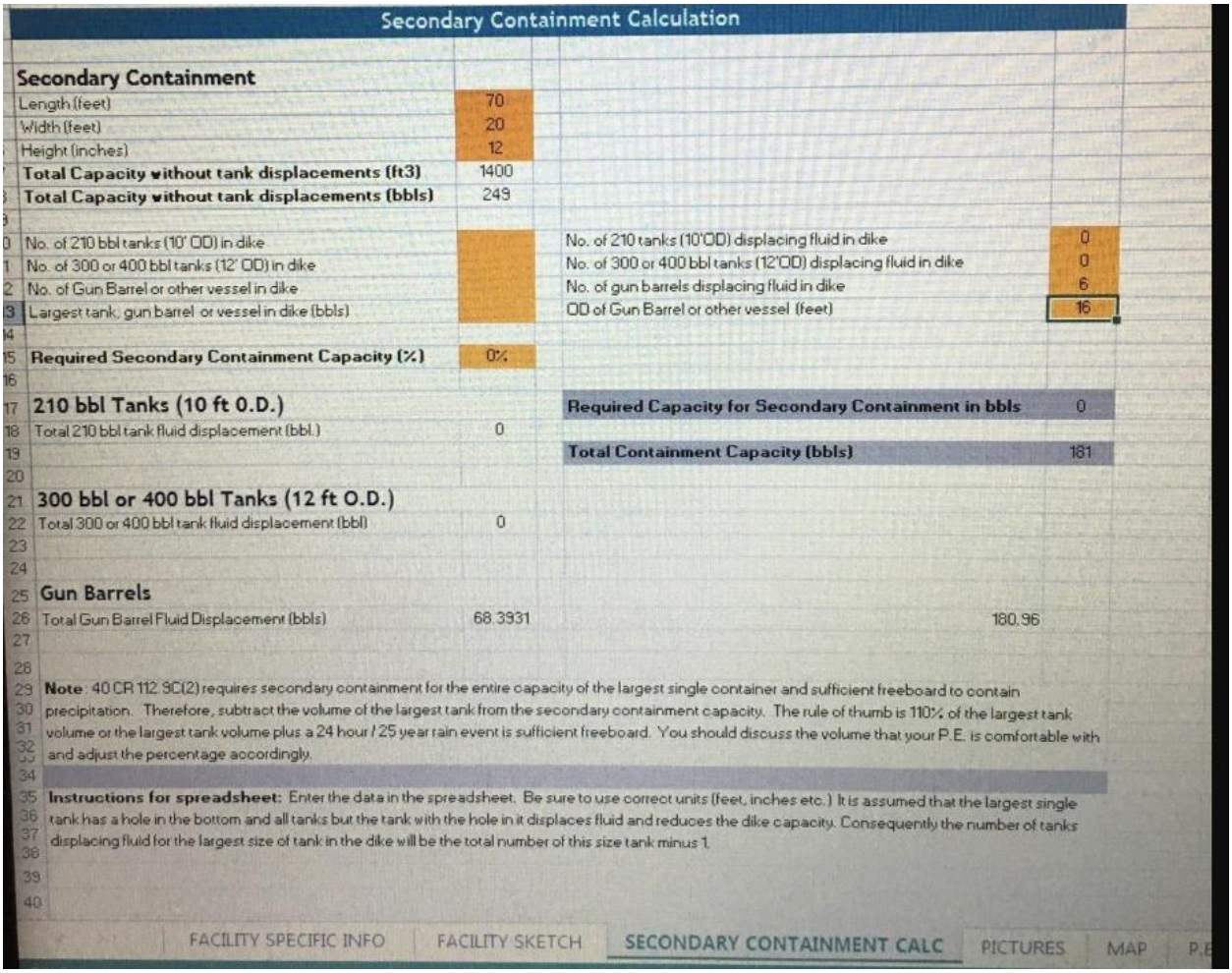

## Secondary Containment Calculation

### Secondary Containment

| | |
|---|---|
| Length (feet) | 70 |
| Width (feet) | 20 |
| Height (inches) | 12 |
| **Total Capacity without tank displacements (ft3)** | 1400 |
| **Total Capacity without tank displacements (bbls)** | 249 |
| No. of 210 bbl tanks (10' OD) in dike | |
| No. of 300 or 400 bbl tanks (12' OD) in dike | |
| No. of Gun Barrel or other vessel in dike | |
| Largest tank, gun barrel or vessel in dike (bbls) | |
| **Required Secondary Containment Capacity (%)** | 0% |

| | |
|---|---|
| No. of 210 tanks (10'OD) displacing fluid in dike | 0 |
| No. of 300 or 400 bbl tanks (12'OD) displacing fluid in dike | 0 |
| No. of gun barrels displacing fluid in dike | 6 |
| OD of Gun Barrel or other vessel (feet) | 16 |
| **Required Capacity for Secondary Containment in bbls** | 0 |
| **Total Containment Capacity (bbls)** | 181 |

### 210 bbl Tanks (10 ft O.D.)

| | |
|---|---|
| Total 210 bbl tank fluid displacement (bbl.) | 0 |

### 300 bbl or 400 bbl Tanks (12 ft O.D.)

| | |
|---|---|
| Total 300 or 400 bbl tank fluid displacement (bbl) | 0 |

### Gun Barrels

| | | |
|---|---|---|
| Total Gun Barrel Fluid Displacement (bbls) | 68.3931 | 180.96 |

**Note**: 40 CR 112.9C(2) requires secondary containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. Therefore, subtract the volume of the largest tank from the secondary containment capacity. The rule of thumb is 110% of the largest tank volume or the largest tank volume plus a 24 hour / 25 year rain event is sufficient freeboard. You should discuss the volume that your P.E. is comfortable with and adjust the percentage accordingly.

**Instructions for spreadsheet:** Enter the data in the spreadsheet. Be sure to use correct units (feet, inches etc.) It is assumed that the largest single tank has a hole in the bottom and all tanks but the tank with the hole in it displaces fluid and reduces the dike capacity. Consequently the number of tanks displacing fluid for the largest size of tank in the dike will be the total number of this size tank minus 1.

FACILITY SPECIFIC INFO | FACILITY SKETCH | SECONDARY CONTAINMENT CALC | PICTURES | MAP | P.E


# COTTON DRAW 32 STATE SWD #002

nOY1803741279 -- Devon Energy

PREPARED BY SAPEC-ECO, LLC.
PREPARED FOR DEVON ENERGY PRODUCTION, LP.

## Remediation Closure Report

**Nathalie Abela**

August 26, 2024

Sapec-Eco, LLC.
311 N Elm St
Temple, OK 73568



August 26, 2024

Attn: NMOCD District 1
1625 N French Dr.
Hobbs, NM 88240

Bureau of Land Management
620 East Green St
Carlsbad, NM, 88220

Re: Remediation Closure Report
NMOCD Incident Number: ***nOY1803741279***
Cotton Draw 32 State SWD #002 API No. 30-025-41524
Unit P, Section 32, Township 24S, Range 32E 1180 FSL 1000 FEL Lea County, NM
GPS Coordinates: Latitude 32.1699175 Longitude -103.6913616

Sapec-Eco, LLC. (Sapec) was contracted by Devon Energy Production Company, LP (Devon) on August 14, 2024, to conduct a detailed assessment of this historical incident, review previous files and submissions, then compile data into this remediation closure report for a produced water release that occurred at the Cotton Draw 32 State SWD #002 (Cotton). This incident was assigned Incident ID nOY1803741279 by the New Mexico Oil Conservation Division (NMOCD).

## *Release Information - nOY1803741279*

The initial Form C-141 was submitted on February 1, 2018 (Appendix A) and stated that on January 21, 2018, suction pressure caused build up which triggered the PSV to release water into the H-pump containment. The facility was shut down and locked out and a vacuum truck was dispatched to remove fluids. Approximately 519 barrels (bbls) produced water was released. A vacuum truck was dispatched and recovered approximately 512 bbls of produced water (510 bbls from the concrete lined H pump containment, 1 from the facility pad surface, and 1 from the adjacent pasture). An environmental contractor will be contacted to assist with delineation and remediation efforts. This initial Form C-141 was approved by the NMOCD on February 6, 2018.

## *Site Characterization*

The Cotton is located in Lea County, NM, approximately twenty-two (22) miles southeast of Malaga, NM. The release area is located in Unit P, Section 32, Township 24S, Range 32E, 32.169736 degrees latitude and -103.691780 degrees longitude. A Location Map is included for reference in Figure 4.

The New Mexico Bureau of Geology and Mineral Resources shows the geology in the Cotton area is comprised of Eolian and piedmont deposits: Interlayered eolian sands and piedmont-slope deposits along the eastern flank of the Pecos River valley, primarily between Roswell and Carlsbad. Typically capped by thin eolian deposits. A Geologic Unit Map can be found in Appendix C.

There are two different soil types that are equally present at the Cotton. The first is found on the north half of the pad area and is Pyote loamy fine sand. The slopes for this type are 0 to 3 percent and the drainage class is well drained. The second is found on the south half of the pad area and is Maljamar and Palomas fine sands, 0 to 3 percent slopes. The drainage class for this soil type is also well drained. Soil type information is according to the United States Department of Agriculture Natural Resources Conservation Service soil survey. The Soil Surveys for each type and a Soil Map can be referenced in Appendix C. Reference Figure 3 for a Topographic Map.

The Cotton resides in a low karst zone and is approximately 6 miles away from the nearest medium karst zone. Figure 2 refers to the Karst Map.

According to a Water Column/Average Depth to Water search within the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is greater than 55 feet below grade surface (bgs). This information is recorded by C-04858-POD1 which is situated approximately 0.35 miles southwest of this release area and was drilled on August 8, 2024. The United States Geological Survey (USGS) offers the site USGS 321005103402301 24S.32E.33.42241 which shows depth to the nearest

Sapec-Eco, LLC.
311 N Elm St
Temple, OK 73568

groundwater is 290 feet bgs. The latest gauge of this site was conducted in 2013, and it is located approximately 1.15 miles to the east of this release area. The nearest surface water body is the Pecos River and is located approximately 16.2 miles to the west of the release area. The U.S. Fish and Wildlife Service National Wetlands Inventory shows the nearest wetland to be a Freshwater Emergent Wetland approximately 1.64 miles to the north of this area. According to Fema's National Flood Hazard Layer search, the Cotton is situated in Zone D – Area of Undetermined Flood Hazard. See Appendix B for referenced Water Surveys and Water-Related Maps.

## *Initial Assessment and Delineation*

On January 25, 2023, an initial assessment was performed by Pima Environmental Services to find full vertical and horizontal delineation of the release area. An area on the west side of the concrete H-Pump containment was affected by fluid spraying out of the containment, measured to be approximately 1,826 square feet, and assessed for contamination. Twenty-four samples were collected from 8 different sample points within the release area for vertical delineation. These samples were collected from depths of 1', 3', and 5' bgs. Ten samples were collected from 10 different sample points around the edges of the release area for horizontal delineation. These samples were collected from a depth of 3' bgs. Background samples were collected from 2 different sample points in the pasture west of the pad area. These samples were collected from a depth of 1' bgs. All samples were analyzed for all constituents listed in Table 1 19.15.29.12 NMAC by Envirotech Analytical Laboratories. The official laboratory results of this sampling event can be found in the following data table. A corresponding Site Map can be found in Figure 1.

January 25, 2023 – Soil Sample Results

| NMOCD Closure Criteria per Table 1 19.15.29.12 NMAC - Depth to Groundwater is 50-100' | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DEVON ENERGY - COTTON DRAW 32 State SWD #002 - nOY1803741279 | | | | | | | | |
| Date: 1/25/2023 | | NM Approved Laboratory Results | | | | | | |
| Sample ID | Depth (BGS) | BTEX mg/kg | Benzene mg/kg | GRO mg/kg | DRO mg/kg | MRO mg/kg | Total TPH mg/kg | Cl mg/kg |
| S1-1' | 1' | ND | ND | ND | ND | ND | 0 | 838 |
| S1-3' | 3' | ND | ND | ND | ND | ND | 0 | 651 |
| S1-5' | 5' | ND | ND | ND | ND | ND | 0 | ND |
| S2-1' | 1' | ND | ND | ND | ND | ND | 0 | 309 |
| S2-3' | 3' | ND | ND | ND | ND | ND | 0 | 428 |
| S2-5' | 5' | ND | ND | ND | ND | ND | 0 | ND |
| S3-1' | 1' | ND | ND | ND | ND | ND | 0 | 327 |
| S3-3' | 3' | ND | ND | ND | ND | ND | 0 | 133 |
| S3-5' | 5' | ND | ND | ND | ND | ND | 0 | ND |
| S4-1' | 1' | ND | ND | ND | ND | ND | 0 | 400 |
| S4-3' | 3' | ND | ND | ND | ND | ND | 0 | 811 |
| S4-5' | 5' | ND | ND | ND | ND | ND | 0 | ND |
| S5-1' | 1' | ND | ND | ND | ND | ND | 0 | 680 |
| S5-3' | 3' | ND | ND | ND | ND | ND | 0 | 485 |
| S5-5' | 5' | ND | ND | ND | ND | ND | 0 | ND |
| S6-1' | 1' | ND | ND | ND | ND | ND | 0 | 691 |
| S6-3' | 3' | ND | ND | ND | ND | ND | 0 | 1030 |
| S6-5' | 5' | ND | ND | ND | ND | ND | 0 | ND |
| S7-1' | 1' | ND | ND | ND | ND | ND | 0 | 601 |
| S7-3' | 3' | ND | ND | ND | ND | ND | 0 | 903 |
| S7-5' | 5' | ND | ND | ND | ND | ND | 0 | ND |
| S8-1' | 1' | ND | ND | ND | ND | ND | 0 | 1290 |
| S8-3' | 3' | ND | ND | ND | ND | ND | 0 | ND |
| S8-5' | 5' | ND | ND | ND | ND | ND | 0 | 394 |
| SW 1 | 3' | ND | ND | ND | ND | ND | 0 | ND |
| SW 2 | 3' | ND | ND | ND | ND | ND | 0 | ND |

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311 N Elm St
Temple, OK 73568

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SW 3 | 3' | ND | ND | ND | ND | ND | 0 | ND |
| SW 4 | 3' | ND | ND | ND | ND | ND | 0 | ND |
| SW 5 | 3' | ND | ND | ND | ND | ND | 0 | ND |
| SW 6 | 3' | ND | ND | ND | ND | ND | 0 | ND |
| SW 7 | 3' | ND | ND | ND | ND | ND | 0 | ND |
| SW 8 | 3' | ND | ND | ND | ND | ND | 0 | ND |
| SW 9 | 3' | ND | ND | ND | ND | ND | 0 | ND |
| SW 10 | 3' | ND | ND | ND | ND | ND | 0 | ND |
| BG 1 | 1' | ND | ND | ND | ND | ND | 0 | ND |
| BG 2 | 1' | ND | ND | ND | ND | ND | 0 | ND |

Complete Laboratory Reports can be found in Appendix E.

## *Remediation Activities*

On August 8, 2024, Devon contracted H&R Enterprises, LLC. (H&R), an approved, licensed New Mexico well driller, to install a borehole on the Chincoteague 32 State Com #3H pad approximately 0.35 miles to the southwest of this release area. This borehole was drilled to 55' bgs and was left open for approximately 120 hours protected by a PVC casing.

On August 14, 2024, H&R returned to the site to gauge the borehole for the presence of water. No water was encountered during the gauging process. The casing was then removed, and the well was plugged in accordance with the approved plugging plan of operations. The depth to ground water for the area within a ½-mile of this site is now classified as 51-100' as per Table 1 19.15.29.12 NMAC.

Based on this new information, the sample results from the previous delineation event are under the regulatory limits of the 51-100' depth to ground water section of Table 1 19.15.29.12 NMAC. No further action is required currently. Devon understands and acknowledges that reclamation of this pad area once it is no longer needed for production or subsequent drilling operations will require an approved reclamation plan addressing a minimum of four feet of non-waste containing earthen material.

## *Liner Inspection*

On August 23, 2024, after Devon submitted a 48-hour notification for a liner inspection (Appendix A), Sapec personnel mobilized to the site to inspect the concrete-lined H-pump secondary containment. This secondary containment measures approximately 51' x 75' and has an approximate 8" curb wall surrounding the perimeter. The capacity for this containment at a perfectly level state is approximately 606 bbls. After a thorough inspection, it was found that this containment has the integrity to hold the volume of released fluids associated with this release. It was also concluded that the only effect to the surrounding areas was from the fluids that sprayed out of the containment area. Photographic Documentation and the Liner Inspection Field Report can be referenced in Appendix D.

## *Closure Request*

Based on the above information, Devon requests that this historical incident, nOY1803741279, be closed. All rules and regulations set forth in 19.15.29.12 NMAC have been complied with.

For questions or additional information, please reach out to:
Dale Woodall with Devon Energy, at 575-748-1838 or email him at Dale.Woodall@dvn.com.
Simon Abela with Sapec-Eco, at 641-821-9018 or email him at s.abela@sapec-eco.com.

Sapec-Eco, LLC.
311 N Elm St
Temple, OK 73568



## *Attachments*

**Figures:**

1- Site Map
2- Karst Map
3- Topographic Map
4- Location Map

**Appendices:**

Appendix A – Initial Form C-141 & 48-Hour Notification
Appendix B – Water Surveys & Water-Related Maps
Appendix C – Soil Survey, Soil Map, & Geologic Unit Map
Appendix D – Liner Inspection Field Report & Photographic Documentation
Appendix E – Laboratory Reports

Sapec-Eco, LLC.
311 N Elm St
Temple, OK 73568



# *Figures:*

**Site Map**

**Karst Map**

**Topographic Map**

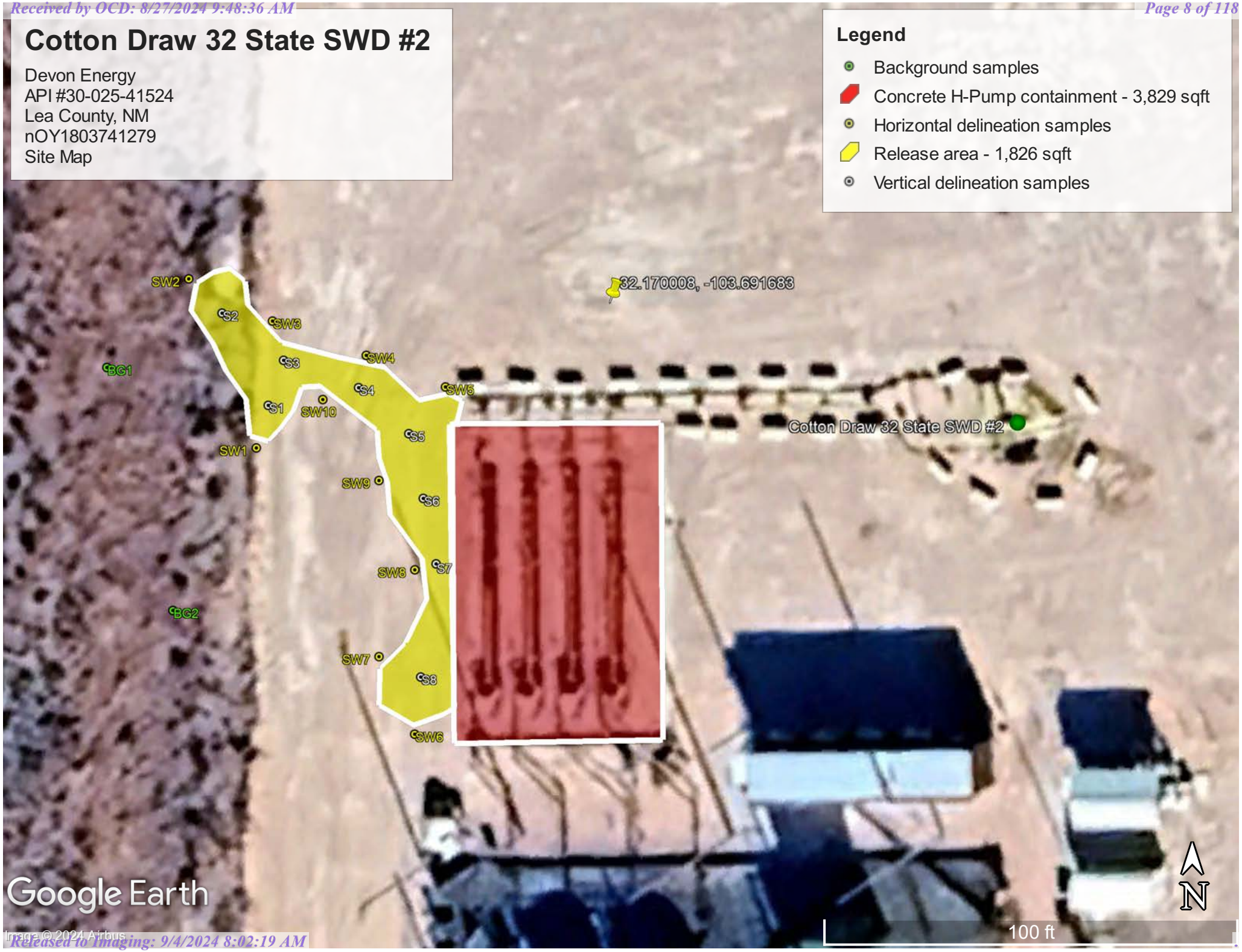
**Location Map**

# Cotton Draw 32 State SWD #2

Devon Energy
API #30-025-41524
Lea County, NM
nOY1803741279
Site Map

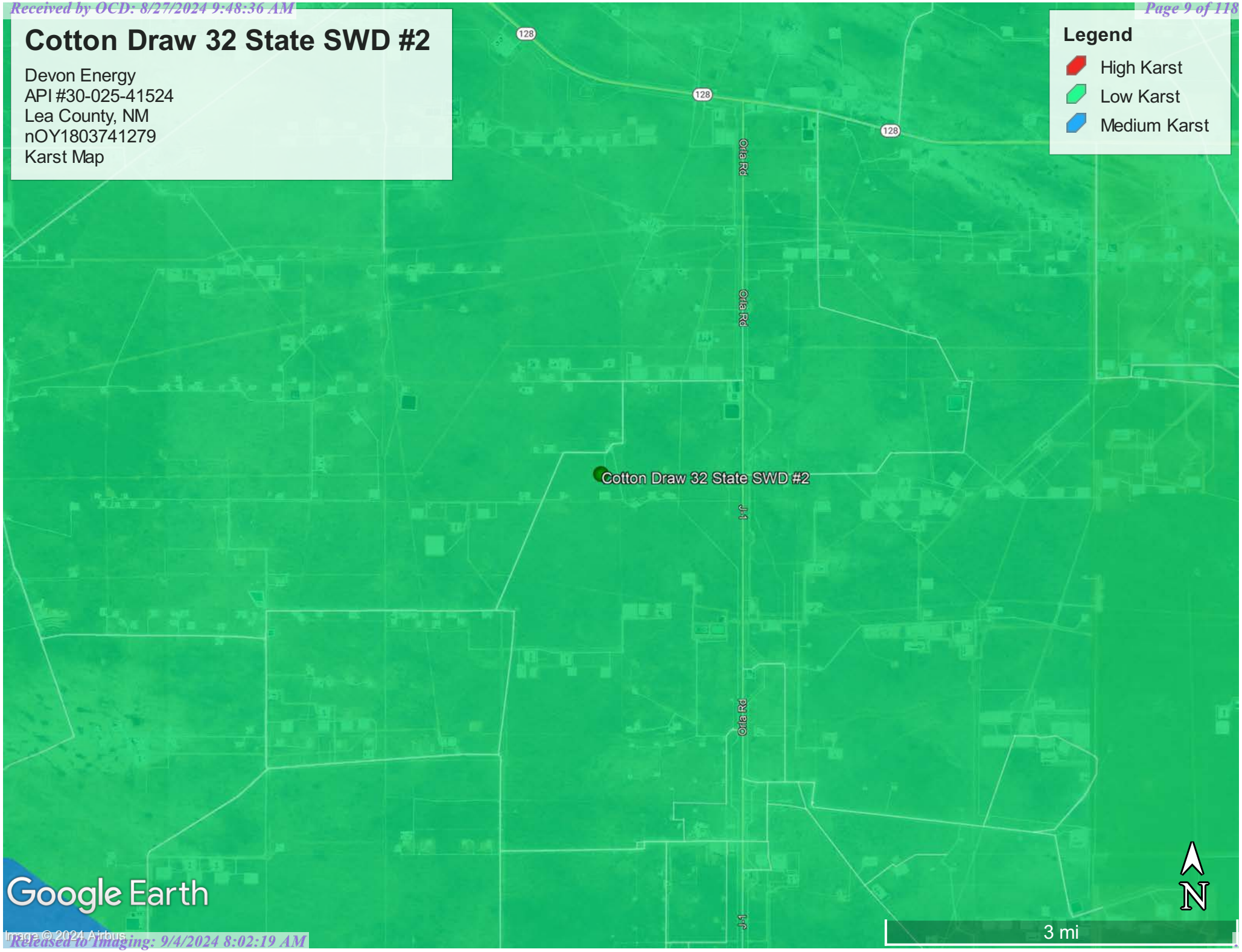
**Legend**

- Background samples
- Concrete H-Pump containment - 3,829 sqft
- Horizontal delineation samples
- Release area - 1,826 sqft
- Vertical delineation samples



# Cotton Draw 32 State SWD #2

Devon Energy
API #30-025-41524
Lea County, NM
nOY1803741279
Karst Map

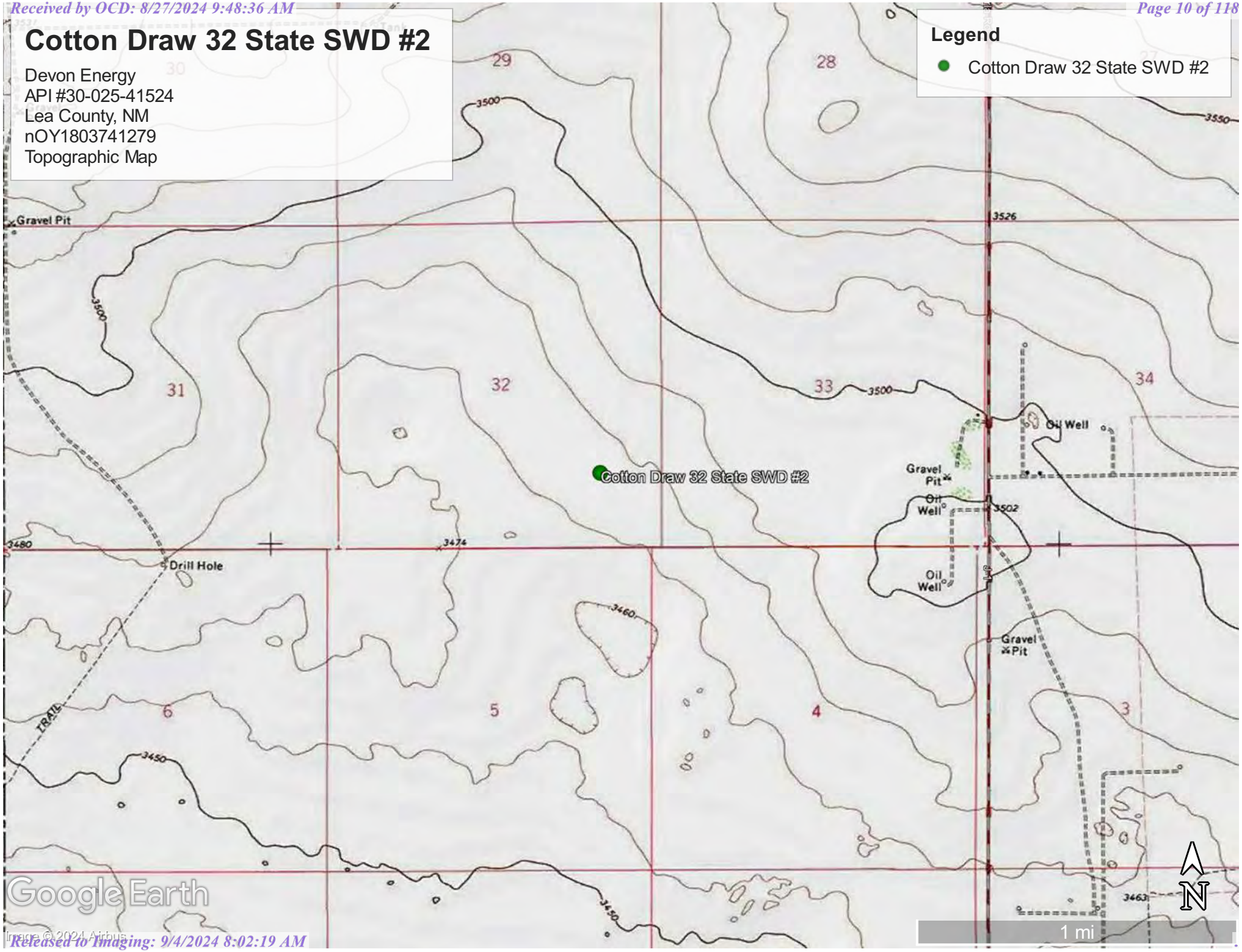


# Cotton Draw 32 State SWD #2

Devon Energy
API #30-025-41524
Lea County, NM
nOY1803741279
Topographic Map

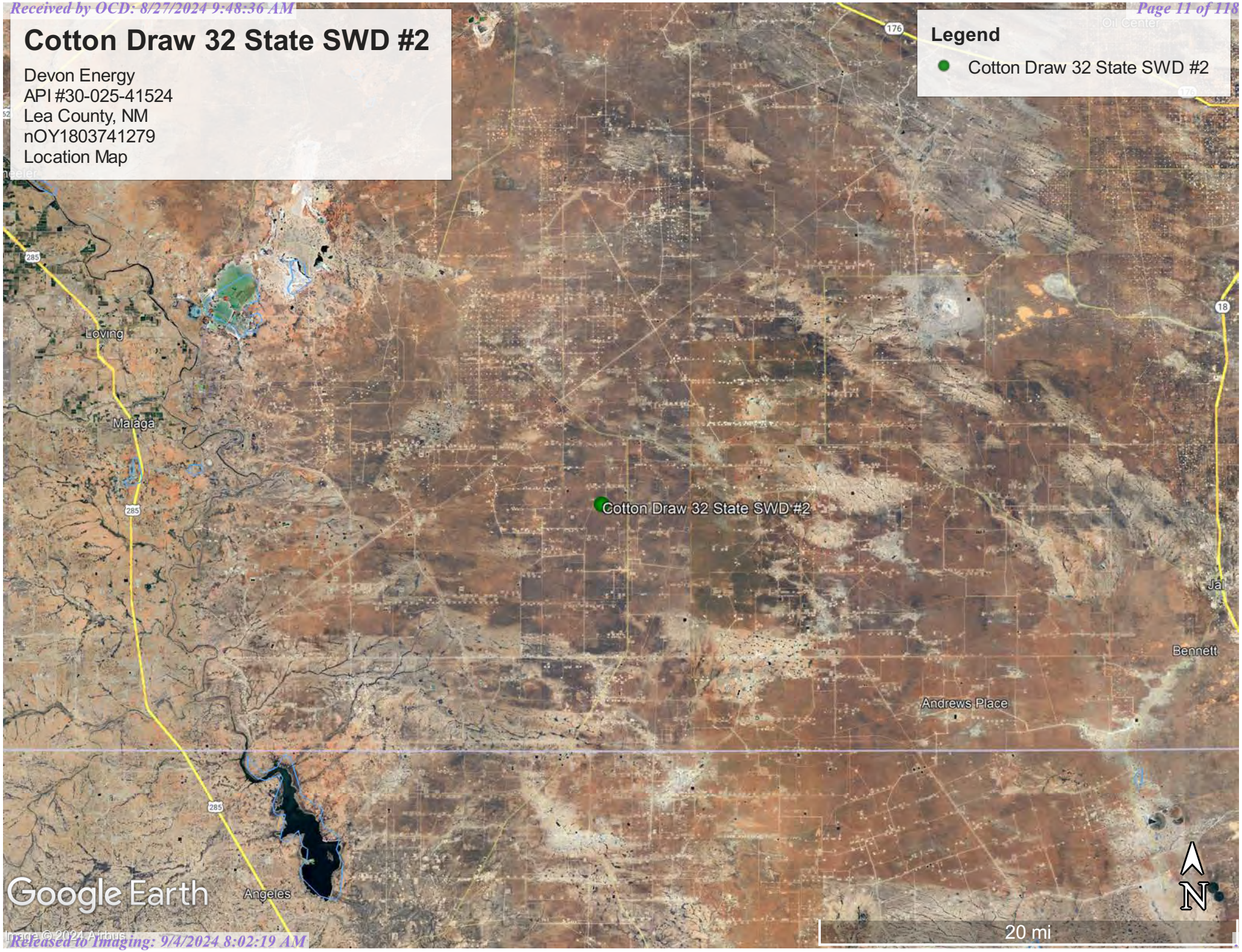
**Legend**

- Cotton Draw 32 State SWD #2



# Cotton Draw 32 State SWD #2

Devon Energy
API #30-025-41524
Lea County, NM
nOY1803741279
Location Map



Sapec-Eco, LLC
311 N Elm St
Temple, OK 73568



# *Appendix A*

**Initial Form C-141**

**48-Hour Notification**

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

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

# Release Notification and Corrective Action

## OPERATOR

☒ Initial Report ☐ Final Report

| | |
|---|---|
| Name of Company Devon Energy Production Company | Contact Kelly Miller, Construction Assistant Foreman |
| Address 6488 Seven Rivers Hwy Artesia, NM 88210 | Telephone No. 575-748-9935 |
| Facility Name Cotton Draw 32 State SWD 002 | Facility Type Salt Water Disposal |

| | | |
|---|---|---|
| Surface Owner Federal | Mineral Owner State | API No. 30-025-41524 |

## LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|---|---|---|---|---|---|---|---|---|
| P | 32 | 24S | 32E | | | | | Lea |

**Latitude**_32.169736 N_ **Longitude**_103.691780 W_ NAD83

## NATURE OF RELEASE

| | | |
|---|---|---|
| Type of Release<br>Produced Water | Volume of Release<br>519bbls | Volume Recovered<br>512bbls |
| Source of Release<br>PSV valve released into H-pump containment | Date and Hour of Occurrence<br>January 21, 2018 @ 7:30 AM MST | Date and Hour of Discovery<br>January 21, 2018 @ 7:30 AM MST |
| Was Immediate Notice Given?<br>☒ Yes ☐ No ☐ Not Required | If YES, To Whom?<br>Olivia Yu, OCD<br>Tammy Honea, SLO<br>Shelly Tucker, BLM | |
| By Whom?<br>Mike Shoemaker, EHS Representative | Date and Hour<br>January 22, 2018 @ 7:29 AM | |
| Was a Watercourse Reached?<br>☐ Yes ☒ No | If YES, Volume Impacting the Watercourse.<br>N/A | |

RECEIVED
By Olivia Yu at 11:21 am, Feb 06, 2018

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Suction pressure caused build up which triggered the PSV to release water into the H-pump containment. The facility was shut down and locked out and a vacuum truck was dispatched to remove fluids.

Describe Area Affected and Cleanup Action Taken.*
Approximately 519bbls produced water was released. A vacuum truck was dispatched and recovered approximately 512 bbls of produced water (510 bbls from the concrete lined H pump containment, 1 from the facility pad surface, and 1 from the adjacent pasture). An environmental contractor will be contacted to assist with delineation and remediation efforts.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

| | |
|---|---|
| Signature: Tamala Robison | OIL CONSERVATION DIVISION |
| Printed Name: Tamala Robison | Approved by Environmental Specialist: |
| Title: Field Admin Support | Approval Date: 2/6/2018 Expiration Date: |
| E-mail Address: Tamala.Robison@dvn.com | Conditions of Approval: see attached directive Attached ☑ |
| Date: 2/1/2018 Phone: 575.748.0174 | |

* Attach Additional Sheets If Necessary

1RP-4954 nOY1803741279 pOY1803741547

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _2/2/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4954__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _3/6/2018_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; $C_6$ thru $C_{36}$), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; $C_6$ thru $C_{36}$), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

**Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.**

**Jim Griswold**
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

# Cotton Draw 32 State SWD 2

## 519bbls produced water

devon

This map is for illustrative purposes only and is neither a legally recorded map nor survey and is not intended to be used as one. Devon makes no warranty, representation, or guarantee of any kind regarding this map.

WGS_1984_Web_Mercator_Auxiliary_Sphere
Prepared by: Tamala Robison
Map is current as of: 02-Feb-2018

N

Miles
0 0.01 0.02 0.04 1: 1,779

**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

QUESTIONS

Action 376294

## QUESTIONS

| | |
|---|---|
| Operator:<br>DEVON ENERGY PRODUCTION COMPANY, LP<br>333 West Sheridan Ave.<br>Oklahoma City, OK 73102 | OGRID:<br>6137 |
| | Action Number:<br>376294 |
| | Action Type:<br>[NOTIFY] Notification Of Liner Inspection (C-141L) |

**QUESTIONS**

| **Prerequisites** | |
|---|---|
| Incident ID (n#) | **nOY1803741279** |
| Incident Name | **NOY1803741279 COTTON DRAW 32 STATE SWD #002 @ 30-025-41524** |
| Incident Type | **Produced Water Release** |
| Incident Status | **Initial C-141 Approved** |
| Incident Well | **[30-025-41524] COTTON DRAW 32 STATE SWD #002** |

| **Location of Release Source** | |
|---|---|
| Site Name | **COTTON DRAW 32 STATE SWD #002** |
| Date Release Discovered | **01/21/2018** |
| Surface Owner | **Federal** |

| **Liner Inspection Event Information**<br>*Please answer all the questions in this group.* | |
|---|---|
| What is the liner inspection surface area in square feet | 3,829 |
| Have all the impacted materials been removed from the liner | Yes |
| Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC | 08/23/2024 |
| Time liner inspection will commence | 04:30 PM |
| Please provide any information necessary for observers to liner inspection | Simon Abela (641) 821-9018 |
| Please provide any information necessary for navigation to liner inspection site | From the intersection of NM128 and Orla Road (C-1), travel south on Orla Rd for 2.35 miles, turn west on lease road for 1 mile, turn south on lease road for 0.52 miles, curve west for 460 feet, curve southwest for 630 feet, curve south for 590 feet, cross cattle guard into location. |

**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

| | |
|---|---|
| Operator:<br>DEVON ENERGY PRODUCTION COMPANY, LP<br>333 West Sheridan Ave.<br>Oklahoma City, OK 73102 | OGRID:<br>6137 |
| | Action Number:<br>376294 |
| | Action Type:<br>[NOTIFY] Notification Of Liner Inspection (C-141L) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| wdale | Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted. | 8/21/2024 |

Sapec-Eco, LLC
311 N Elm St
Temple, OK 73568



# *Appendix B*

**Water Surveys**

**Water-Related Maps**

*New Mexico Office of the State Engineer*

# Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are smallest to largest)

(meters)

(In feet)

| POD Number | Code | Sub basin | County | Q64 | Q16 | Q4 | Sec | Tws | Range | X | Y | Map | Distance | Well Depth | Depth Water | Water Column |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 04536 POD1 | | C | LE | NW | NE | NE | 33 | 24S | 32E | 625019.4 | 3561244.5 | | 2042 | 500 | 314 | 186 |
| C 04722 POD2 | | CUB | LE | NE | NW | NW | 06 | 25S | 32E | 620808.2 | 3559499.5 | | 2628 | 55 | | |
| C 04795 POD1 | | CUB | LE | SE | SE | NW | 08 | 25S | 32E | 622864.7 | 3557423.8 | | 2647 | | | |
| C 04620 POD1 | | CUB | LE | SE | SW | SE | 06 | 25S | 32E | 621445.0 | 3558018.4 | | 2787 | 55 | | |

Average Depth to Water: **314 feet**

Minimum Depth: **314 feet**

Maximum Depth: **314 feet**

**Record Count:** 4

**Basin/County Search:**
**County:** LE

**UTM Filters (in meters):**
**Easting:** 623384.94
**Northing:** 3560019.74
**Radius:** 03000

*** UTM location was derived from PLSS - see Help**

# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

### 1. GENERAL AND WELL LOCATION

| | | |
|---|---|---|
| OSE POD NO. (WELL NO.): Pod-1 | WELL TAG ID NO. | OSE FILE NO(S): C-4858 |
| WELL OWNER NAME(S): Devon Energy Production | | PHONE (OPTIONAL) |
| WELL OWNER MAILING ADDRESS: 6488 Seven Rivers Hwy. | | CITY: Artesia STATE: NM ZIP: 88210 |

| WELL LOCATION (FROM GPS) | | DEGREES | MINUTES | SECONDS | |
|---|---|---|---|---|---|
| | LATITUDE | 32 | 10 | 03.28 | N |
| | LONGITUDE | -103 | 41 | 50.02 | W |

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE: SE SE SW S-32 T-24S R-32E

### 2. DRILLING & CASING INFORMATION

| LICENSE NO. | NAME OF LICENSED DRILLER | NAME OF WELL DRILLING COMPANY |
|---|---|---|
| WD-1862 | James Hawley | H&R Enterprises, LLC. |

| DRILLING STARTED | DRILLING ENDED | DEPTH OF COMPLETED WELL (FT) | BORE HOLE DEPTH (FT) | DEPTH WATER FIRST ENCOUNTERED (FT) |
|---|---|---|---|---|
| 8/8/24 | 8/8/24 | 55 | 55 | Dry Hole |

COMPLETED WELL IS: ☐ ARTESIAN *add Centralizer info below ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): N/A

DATE STATIC MEASURED: 8/14/24

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

CHECK HERE IF PITLESS ADAPTER IS INSTALLED ☐

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM (inches) | CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen) | CASING CONNECTION TYPE (add coupling diameter) | CASING INSIDE DIAM. (inches) | CASING WALL THICKNESS (inches) | SLOT SIZE (inches) |
|---|---|---|---|---|---|---|---|
| | | | No Casing left in hole | | | | |

### 3. ANNULAR MATERIAL

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM. (inches) | LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below) | AMOUNT (cubic feet) | METHOD OF PLACEMENT |
|---|---|---|---|---|---|
| | | | N/A | | |

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

| FILE NO. | POD NO. | TRN NO. |
|---|---|---|
| LOCATION | WELL TAG ID NO. | PAGE 1 OF 2 |

**4. HYDROGEOLOGIC LOG OF WELL**

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | THICKNESS (feet) | COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES **(attach supplemental sheets to fully describe all units)** | WATER BEARING? (YES / NO) | ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm) |
|---|---|---|---|---|---|
| 0 | 5 | 5 | red clay mixed with caliche | Y ✓ N | |
| 5 | 20 | 15 | tan sandy clay | Y ✓ N | |
| 20 | 25 | 5 | red sand | Y ✓ N | |
| 25 | 55 | 30 | red dry clay | Y ✓ N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
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| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY: N/A

TOTAL ESTIMATED WELL YIELD (gpm):

**5. TEST; RIG SUPERVISION**

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: well was drilled 8/8/24, no water was encountered, well was gauged on 8/14/24 and was dry, casing was removed and well was plugged in accordance with the approved plugging plan of operations.

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Nathan Smelcer

**6. SIGNATURE**

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

James Hawley — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

8/15/24 — DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

| FILE NO. | POD NO. | TRN NO. | |
|---|---|---|---|
| LOCATION | | WELL TAG ID NO. | PAGE 2 OF 2 |

# PLUGGING RECORD

**NOTE:** A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging – 19.27.4 NMAC

## I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4858 Pod-1

Well owner: Devon Energy Production Phone No.: _____

Mailing address: 6488 Seven Rivers Hwy

City: Artesia State: NM Zip code: 88210

## II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: H&R Enterprises, LLC.

2) New Mexico Well Driller License No.: WD-1862 Expiration Date: 6/25

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): James Hawley

4) Date well plugging began: 8/14/24 Date well plugging concluded: 8/14/24

5) GPS Well Location: Latitude: 32 deg, 10 min, 03.28 sec
Longitude: -103 deg, 41 min, 50.02 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 55 ft below ground level (bgl), by the following manner: well sounder

7) Static water level measured at initiation of plugging: Dry ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 7/1/24

9) Were all plugging activities consistent with an approved plugging plan? no If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

GPS on plugging plan did not match the GPS on the permit, something got mixed up, also the theoretical volume on the plugging plan was for 2 inch casing, not the actual 6 inch borehole that was plugged, the correct volumes are listed on the log.

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

**For each interval plugged, describe within the following columns:**

| Depth (ft bgl) | Plugging Material Used (include any additives used) | Volume of Material Placed (gallons) | Theoretical Volume of Borehole/ Casing (gallons) | Placement Method (tremie pipe, other) | Comments ("casing perforated first", "open annular space also plugged", etc.) |
|---|---|---|---|---|---|
| | 0-10' Hydrated Bentonite chips | 15 | 14.7 | pour | |
| | 10'-55' drill cuttings | 66.15 | 66.15 | pour | |

| MULTIPLY | | BY | | AND OBTAIN |
|---|---|---|---|---|
| cubic feet | x | 7.4805 | = | gallons |
| cubic yards | x | 201.97 | = | gallons |

**III. SIGNATURE:**

I, James Hawley, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Signature of Well Driller

8/15/24
Date

Version: September 8, 2009
Page 2 of 2

# OSE POD Location Map




8/21/2024, 8:30:25 AM

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

Esri, HERE, iPC, Esri, HERE, Garmin, iPC, Maxar

GIS WATERS PODs

- Pending
- OSE District Boundary

Water Right Regulations

- Closure Area
- Artesian Planning Area

New Mexico State Trust Lands

- Subsurface Estate



Online web user

This is an unofficial map from the OSE's online application.

# National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

## Search Results -- 1 sites found

**site_no list =**

- 321005103402301

**Minimum number of levels =** 1

Save file of selected sites to local disk for future upload

---

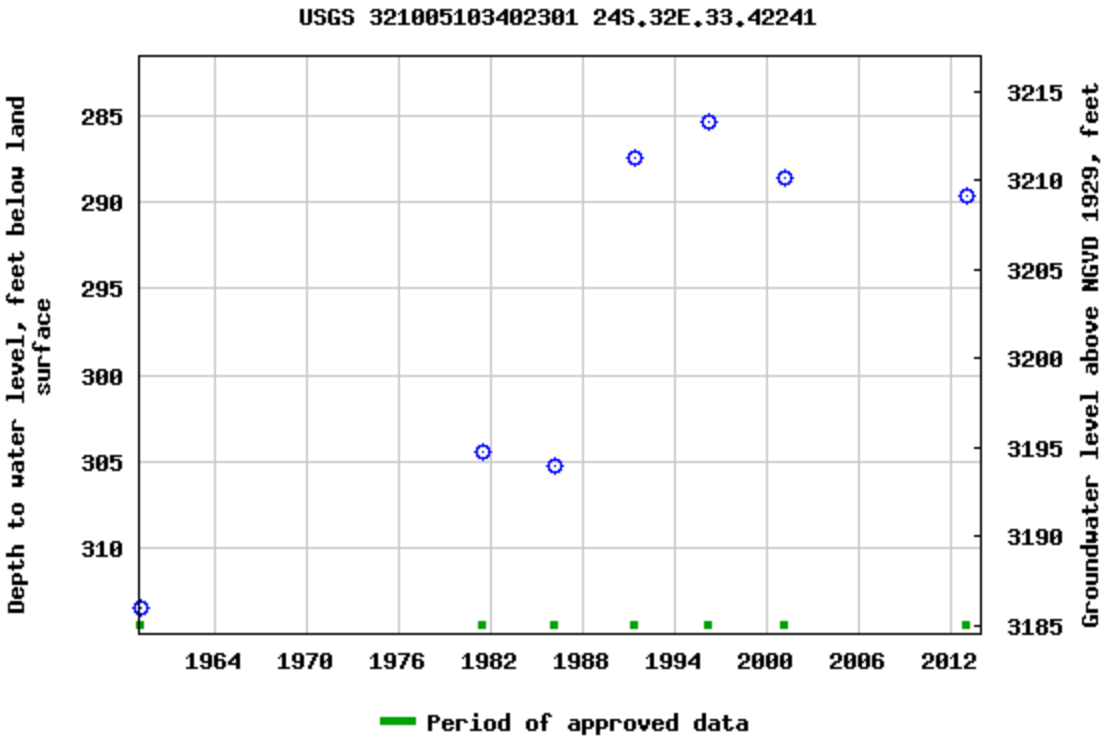
## USGS 321005103402301 24S.32E.33.42241

Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13070001
Latitude 32°10'21.6", Longitude 103°40'18.9" NAD83
Land-surface elevation 3,499.00 feet above NGVD29
The depth of the well is 367 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

**Output formats**

| |
|---|
| Table of data |
| Tab-separated data |
| Graph of data |
| Reselect period |




Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

---

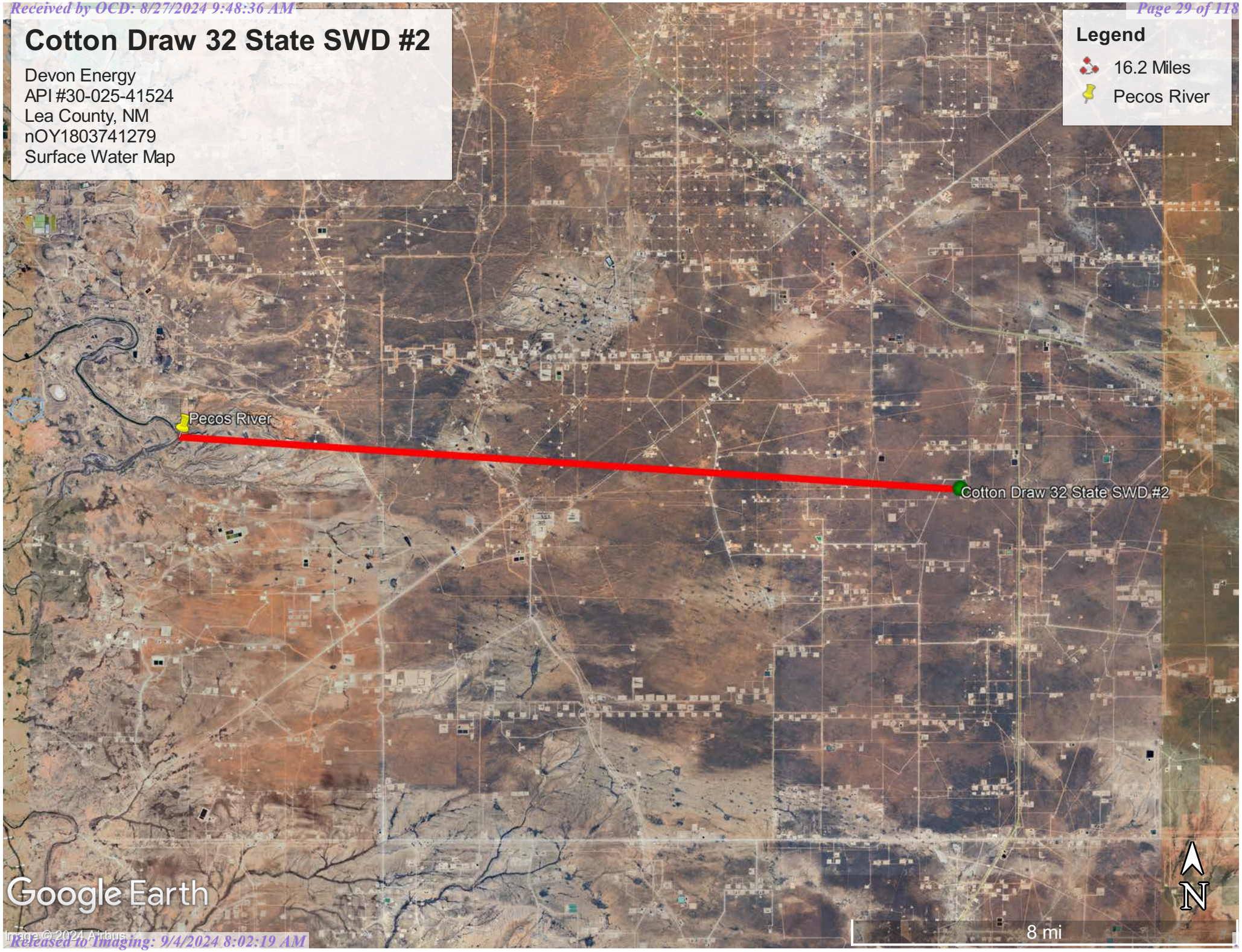
Questions or Comments
Help
Data Tips
Explanation of terms
Subscribe for system changes

USGS science for a changing world

National Water Information System: Mapper

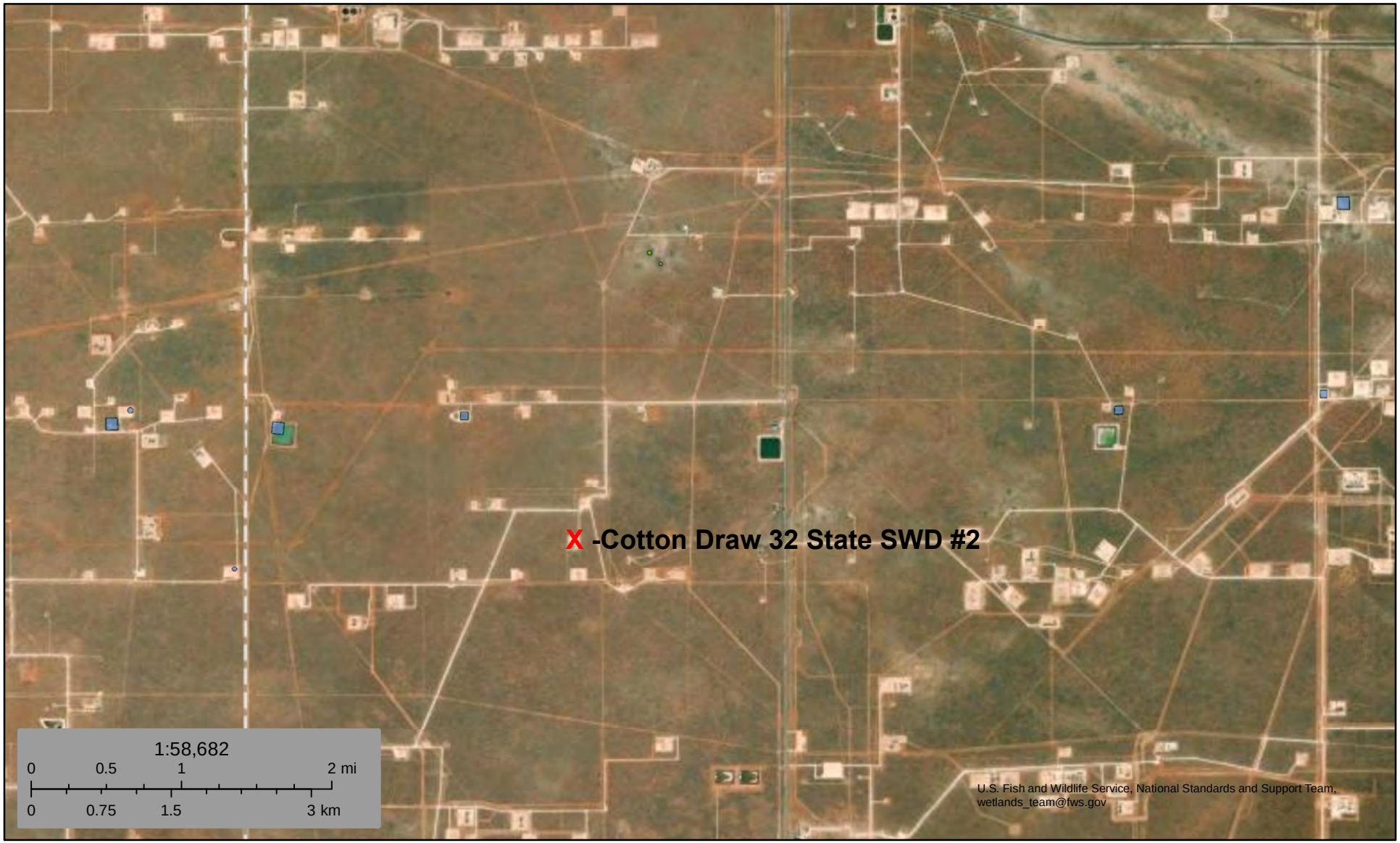
# Cotton Draw 32 State SWD #2

Devon Energy
API #30-025-41524
Lea County, NM
nOY1803741279
Surface Water Map



U.S. Fish and Wildlife Service
National Wetlands Inventory

# Wetlands Map




August 24, 2024

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

# National Flood Hazard Layer FIRMette

FEMA

103°41'48"W 32°10'26"N


103°41'10"W 32°9'56"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

**SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

**OTHER AREAS**
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

**GENERAL STRUCTURES**
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

**MAP PANELS**
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/21/2024 at 9:39 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Sapec-Eco, LLC
311 N Elm St
Temple, OK 73568



# *Appendix C*

**Soil Survey**

**Soil Map**

**Geologic Unit Map**

# Lea County, New Mexico

## MF—Maljamar and Palomas fine sands, 0 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* dmqb
*Elevation:* 3,000 to 3,900 feet
*Mean annual precipitation:* 10 to 15 inches
*Mean annual air temperature:* 60 to 62 degrees F
*Frost-free period:* 190 to 205 days
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Maljamar and similar soils:* 46 percent
*Palomas and similar soils:* 44 percent
*Minor components:* 10 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Maljamar

#### Setting

*Landform:* Plains
*Landform position (three-dimensional):* Rise
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Sandy eolian deposits derived from sedimentary rock

#### Typical profile

*A - 0 to 24 inches:* fine sand
*Bt - 24 to 50 inches:* sandy clay loam
*Bkm - 50 to 60 inches:* cemented material

#### Properties and qualities

*Slope:* 0 to 3 percent
*Depth to restrictive feature:* 40 to 60 inches to petrocalcic
*Drainage class:* Well drained
*Runoff class:* Very low
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 5 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 2.0
*Available water supply, 0 to 60 inches:* Low (about 5.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 7e

*Land capability classification (nonirrigated):* 7e
*Hydrologic Soil Group:* B
*Ecological site:* R070BD003NM - Loamy Sand
*Hydric soil rating:* No

### Description of Palomas

#### Setting

*Landform:* Plains
*Landform position (three-dimensional):* Rise
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Alluvium derived from sandstone

#### Typical profile

*A - 0 to 16 inches:* fine sand
*Bt - 16 to 60 inches:* sandy clay loam
*Bk - 60 to 66 inches:* sandy loam

#### Properties and qualities

*Slope:* 0 to 3 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Low
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.60 to 2.00 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 45 percent
*Gypsum, maximum content:* 1 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 2.0
*Available water supply, 0 to 60 inches:* Moderate (about 7.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7e
*Hydrologic Soil Group:* B
*Ecological site:* R070BD003NM - Loamy Sand
*Hydric soil rating:* No

### Minor Components

#### Kermit

*Percent of map unit:* 5 percent
*Ecological site:* R070BC022NM - Sandhills
*Hydric soil rating:* No

#### Wink

*Percent of map unit:* 5 percent
*Ecological site:* R070BD003NM - Loamy Sand

*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 20, Sep 6, 2023

# Lea County, New Mexico

## PT—Pyote loamy fine sand

### Map Unit Setting

*National map unit symbol:* dmqp
*Elevation:* 3,000 to 3,900 feet
*Mean annual precipitation:* 10 to 12 inches
*Mean annual air temperature:* 60 to 62 degrees F
*Frost-free period:* 190 to 200 days
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Pyote and similar soils:* 85 percent
*Minor components:* 15 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Pyote

#### Setting

*Landform:* Plains
*Landform position (three-dimensional):* Rise
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Sandy eolian deposits derived from sedimentary rock

#### Typical profile

*A - 0 to 25 inches:* loamy fine sand
*Bt - 25 to 60 inches:* fine sandy loam

#### Properties and qualities

*Slope:* 0 to 3 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Negligible
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 5 percent
*Gypsum, maximum content:* 1 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 2.0
*Available water supply, 0 to 60 inches:* Low (about 5.3 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 6e
*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* A
*Ecological site:* R070BD003NM - Loamy Sand
*Hydric soil rating:* No

**Minor Components**

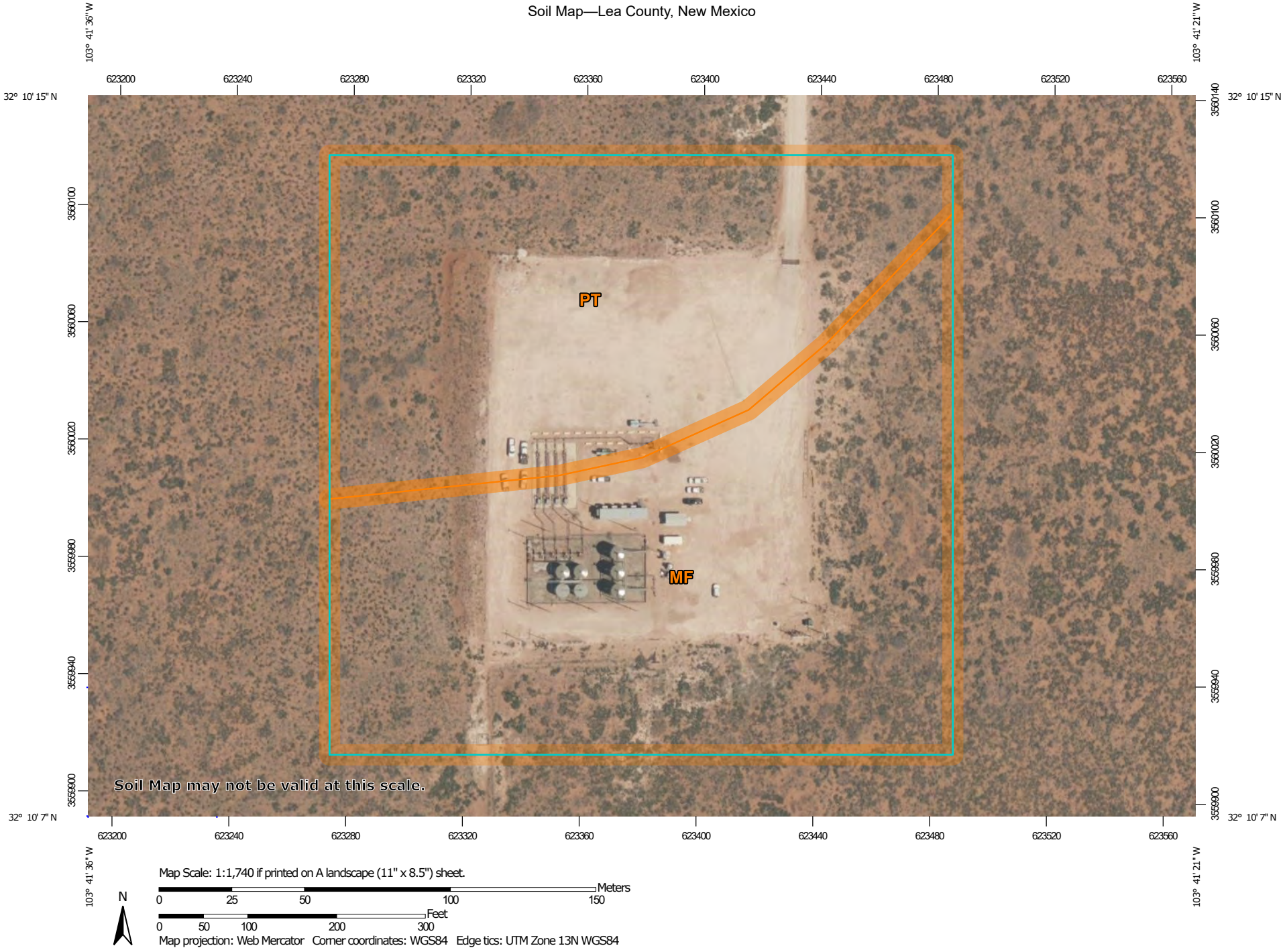
**Maljamar**
*Percent of map unit:* 8 percent
*Ecological site:* R070BD003NM - Loamy Sand
*Hydric soil rating:* No

**Palomas**
*Percent of map unit:* 7 percent
*Ecological site:* R070BD003NM - Loamy Sand
*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 20, Sep 6, 2023

# Soil Map—Lea County, New Mexico




Map Scale: 1:1,740 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

## MAP LEGEND

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**
- Streams and Canals

**Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**
- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 20, Sep 6, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

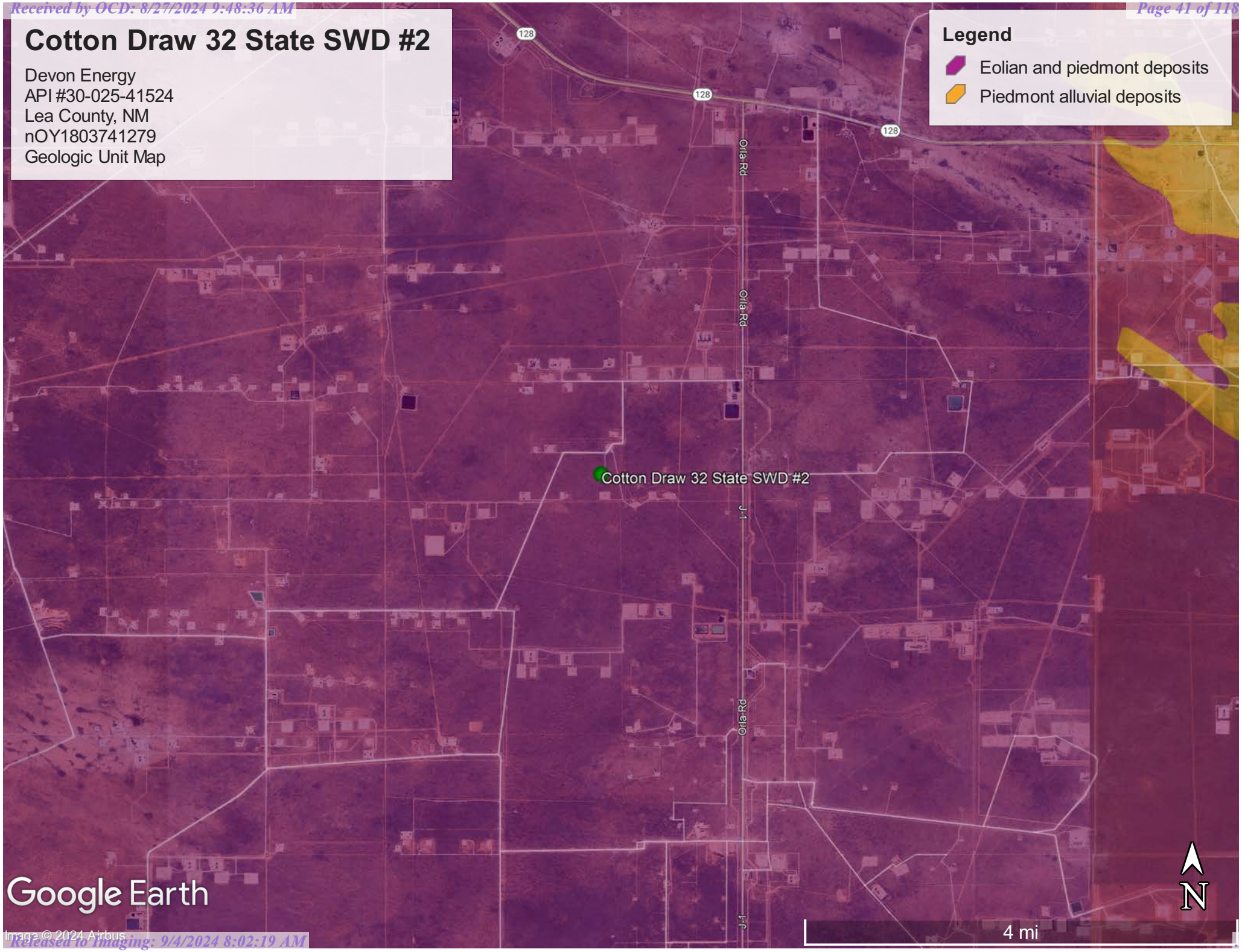
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| MF | Maljamar and Palomas fine sands, 0 to 3 percent slopes | 6.1 | 56.0% |
| PT | Pyote loamy fine sand | 4.8 | 44.0% |
| **Totals for Area of Interest** | | **10.8** | **100.0%** |

# Cotton Draw 32 State SWD #2

Devon Energy
API #30-025-41524
Lea County, NM
nOY1803741279
Geologic Unit Map



Sapec-Eco, LLC
311 N Elm St
Temple, OK 73568



# *Appendix D*

**Liner Inspection Field Report**

**Photographic Documentation**

Sapec-Eco, LLC.
311 N Elm St
Temple, OK 73568

SAPEC-ECO

# Liner Inspection Field Report

Date & Time of Inspection: Friday, August 23, 2024 16:36

Date 48-Hour Notification Submitted/Accepted: Wednesday, August 21, 2024

Location Name & Details: Cotton Draw 32 State SWD #2 (P-32-24S-32E, Lea County, 32.1699175, -103.6913616)

NMOCD Incident ID: nOY1803741279

Operator: Devon Energy Production, LP

Liner Type: Earthen w/liner | Earthen no liner | Polystar | Steel w/poly liner | Steel w/spray epoxy | No Liner

Other: **Concrete with concrete curb perimeter**

| Visualization | Yes | No | Comments |
|---|---|---|---|
| Is there a tear in the liner? | | X | |
| Are there holes in the liner? | | X | |
| Is the liner retaining any fluids? | | X | Some sand blown in from surroundings |
| Does the liner have integrity to contain a leak? | X | | |

Comments: _____

Inspector Name: Simon T Abela

Inspector Signature: _____

## Pima Assessment January 2023


**Lease Sign**


**North flowline looking west**


**North flowline looking east to wellhead**


**West side looking south**


**West side looking north**


**East side looking north**

East side looking west

Southeast side looking north

East side looking south

## Sapec Liner Inspection 2024

Northeast corner looking south

Northeast corner looking west


**Southeast corner looking west**


**Southeast corner looking north**


**South side looking northwest**


**Southwest corner looking north**


**Southwest corner looking east**


**Northwest corner looking east**


**Northwest corner looking south**


**North side looking south**


**North side looking southeast**

Sapec-Eco, LLC
311 N Elm St
Temple, OK 73568



# *Appendix E*

## Laboratory Reports

Report to:

Tom Bynum

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

# envirotech

***Practical Solutions for a Better Tomorrow***

## Analytical Report

### Pima Environmental Services-Carlsbad

| | |
|---|---|
| Project Name: | Cotton Draw 32 St 2 SWD |
| Work Order: | E301136 |
| Job Number: | 01058-0007 |
| Received: | 1/27/2023 |

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/1/23

Date Reported: 2/1/23

Tom Bynum
PO Box 247
Plains, TX 79355-0247

Project Name: Cotton Draw 32 St 2 SWD
Workorder: E301136
Date Received: 1/27/2023 8:30:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/27/2023 8:30:00AM, under the Project Name: Cotton Draw 32 St 2 SWD.

The analytical test results summarized in this report with the Project Name: Cotton Draw 32 St 2 SWD apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

**Raina Schwanz**
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

**Alexa Michaels**
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

**Southern New Mexico Area**
**Lynn Jarboe**
Technical Representative/Client Services
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljarboe@envirotech-inc.com

**West Texas Midland/Odessa Area**
**Rayny Hagan**
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

# Table of Contents

# Table of Contents (continued)

# Sample Summary

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | **Reported:** |
| PO Box 247 | Project Number: | 01058-0007 | |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 02/01/23 13:48 |

| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
|---|---|---|---|---|---|
| S1 - 1' | E301136-01A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S1 - 3' | E301136-02A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S1 - 5' | E301136-03A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S2 - 1' | E301136-04A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S2 - 3' | E301136-05A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S2 - 5' | E301136-06A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S3 - 1' | E301136-07A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S3 - 3' | E301136-08A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S3 - 5' | E301136-09A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S4 - 1' | E301136-10A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S4 - 3' | E301136-11A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S4 - 5' | E301136-12A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S5 - 1' | E301136-13A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S5 - 3' | E301136-14A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S5 - 5' | E301136-15A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S6 - 1' | E301136-16A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S6 - 3' | E301136-17A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S6 - 5' | E301136-18A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S7 - 1' | E301136-19A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S7 - 3' | E301136-20A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S1 - 1'**

**E301136-01**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/27/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/27/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/27/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/27/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/27/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.3 %* | *70-130* | *01/27/23* | *01/27/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *99.9 %* | *70-130* | *01/27/23* | *01/27/23* | |
| *Surrogate: Toluene-d8* | | *101 %* | *70-130* | *01/27/23* | *01/27/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.3 %* | *70-130* | *01/27/23* | *01/27/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *99.9 %* | *70-130* | *01/27/23* | *01/27/23* | |
| *Surrogate: Toluene-d8* | | *101 %* | *70-130* | *01/27/23* | *01/27/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *95.4 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **838** | 40.0 | 2 | 01/27/23 | 01/27/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S1 - 3'**

**E301136-02**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.0 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.0 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *100 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **651** | 20.0 | 1 | 01/27/23 | 01/27/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S1 - 5'**

**E301136-03**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *97.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *97.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *105 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/27/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S2 - 1'**

**E301136-04**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.0 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *98.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.0 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *98.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *101 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **309** | 20.0 | 1 | 01/27/23 | 01/27/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S2 - 3'**

**E301136-05**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *97.7 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **428** | 20.0 | 1 | 01/27/23 | 01/27/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S2 - 5'**

**E301136-06**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *97.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *97.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *102 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S3 - 1'**

**E301136-07**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *102 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **327** | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S3 - 3'**

**E301136-08**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.0 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.0 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *100 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **133** | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S3 - 5'**

**E301136-09**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *111 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S4 - 1'**

**E301136-10**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *96.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *101 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **400** | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S4 - 3'**

**E301136-11**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.6 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.6 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *105 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **811** | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S4 - 5'**

**E301136-12**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *97.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *97.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *106 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S5 - 1'**

**E301136-13**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *99.6 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *99.6 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *103 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **680** | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S5 - 3'**

**E301136-14**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.2 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *98.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.6 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.2 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *98.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.6 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *102 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **485** | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S5 - 5'**

**E301136-15**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *106 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S6 - 1'**

**E301136-16**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *98.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *98.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *103 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **691** | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S6 - 3'**

**E301136-17**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *102 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **1030** | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S6 - 5'**

**E301136-18**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *100 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *109 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S7 - 1'**

**E301136-19**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *99.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *99.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *101 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *105 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **601** | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

**S7 - 3'**

**E301136-20**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *98.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *95.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *98.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *99.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304042 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *105 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304053 |
| Chloride | **903** | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# QC Summary Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | **Reported:** |
| PO Box 247 | Project Number: | 01058-0007 | |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

## Volatile Organic Compounds by EPA 8260B

Analyst: IY

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2304047-BLK1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Benzene | ND | 0.0250 | | | | | | | |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| o-Xylene | ND | 0.0250 | | | | | | | |
| p,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | | | | | | | |
| *Surrogate: Bromofluorobenzene* | *0.481* | | *0.500* | | *96.1* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.509* | | *0.500* | | *102* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.499* | | *0.500* | | *99.8* | *70-130* | | | |
| **LCS (2304047-BS1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Benzene | 2.37 | 0.0250 | 2.50 | | 94.9 | 70-130 | | | |
| Ethylbenzene | 2.41 | 0.0250 | 2.50 | | 96.4 | 70-130 | | | |
| Toluene | 2.37 | 0.0250 | 2.50 | | 94.8 | 70-130 | | | |
| o-Xylene | 2.52 | 0.0250 | 2.50 | | 101 | 70-130 | | | |
| p,m-Xylene | 4.96 | 0.0500 | 5.00 | | 99.2 | 70-130 | | | |
| Total Xylenes | 7.48 | 0.0250 | 7.50 | | 99.7 | 70-130 | | | |
| *Surrogate: Bromofluorobenzene* | *0.535* | | *0.500* | | *107* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.513* | | *0.500* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.501* | | *0.500* | | *100* | *70-130* | | | |
| **Matrix Spike (2304047-MS1)** | | | | **Source: E301136-01** | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Benzene | 2.37 | 0.0250 | 2.50 | ND | 94.6 | 48-131 | | | |
| Ethylbenzene | 2.36 | 0.0250 | 2.50 | ND | 94.5 | 45-135 | | | |
| Toluene | 2.34 | 0.0250 | 2.50 | ND | 93.6 | 48-130 | | | |
| o-Xylene | 2.46 | 0.0250 | 2.50 | ND | 98.4 | 43-135 | | | |
| p,m-Xylene | 4.85 | 0.0500 | 5.00 | ND | 97.0 | 43-135 | | | |
| Total Xylenes | 7.31 | 0.0250 | 7.50 | ND | 97.4 | 43-135 | | | |
| *Surrogate: Bromofluorobenzene* | *0.523* | | *0.500* | | *105* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.511* | | *0.500* | | *102* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.500* | | *0.500* | | *99.9* | *70-130* | | | |
| **Matrix Spike Dup (2304047-MSD1)** | | | | **Source: E301136-01** | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Benzene | 2.33 | 0.0250 | 2.50 | ND | 93.3 | 48-131 | 1.38 | 23 | |
| Ethylbenzene | 2.34 | 0.0250 | 2.50 | ND | 93.6 | 45-135 | 0.872 | 27 | |
| Toluene | 2.34 | 0.0250 | 2.50 | ND | 93.7 | 48-130 | 0.128 | 24 | |
| o-Xylene | 2.42 | 0.0250 | 2.50 | ND | 96.8 | 43-135 | 1.60 | 27 | |
| p,m-Xylene | 4.80 | 0.0500 | 5.00 | ND | 95.9 | 43-135 | 1.06 | 27 | |
| Total Xylenes | 7.22 | 0.0250 | 7.50 | ND | 96.2 | 43-135 | 1.24 | 27 | |
| *Surrogate: Bromofluorobenzene* | *0.531* | | *0.500* | | *106* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.522* | | *0.500* | | *104* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.503* | | *0.500* | | *101* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | **Reported:** |
| PO Box 247 | Project Number: | 01058-0007 | |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2304047-BLK1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| *Surrogate: Bromofluorobenzene* | *0.481* | | *0.500* | | *96.1* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.509* | | *0.500* | | *102* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.499* | | *0.500* | | *99.8* | *70-130* | | | |
| **LCS (2304047-BS2)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Gasoline Range Organics (C6-C10) | 43.1 | 20.0 | 50.0 | | 86.2 | 70-130 | | | |
| *Surrogate: Bromofluorobenzene* | *0.508* | | *0.500* | | *102* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.514* | | *0.500* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.504* | | *0.500* | | *101* | *70-130* | | | |
| **Matrix Spike (2304047-MS2)** | | | | **Source: E301136-01** | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Gasoline Range Organics (C6-C10) | 43.2 | 20.0 | 50.0 | ND | 86.3 | 70-130 | | | |
| *Surrogate: Bromofluorobenzene* | *0.504* | | *0.500* | | *101* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.513* | | *0.500* | | *103* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.508* | | *0.500* | | *102* | *70-130* | | | |
| **Matrix Spike Dup (2304047-MSD2)** | | | | **Source: E301136-01** | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Gasoline Range Organics (C6-C10) | 43.8 | 20.0 | 50.0 | ND | 87.6 | 70-130 | 1.43 | 20 | |
| *Surrogate: Bromofluorobenzene* | *0.495* | | *0.500* | | *99.0* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.504* | | *0.500* | | *101* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.501* | | *0.500* | | *100* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | **Reported:** |
| PO Box 247 | Project Number: | 01058-0007 | |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

## Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2304042-BLK1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| *Surrogate: n-Nonane* | *55.2* | | *50.0* | | *110* | *50-200* | | | |
| **LCS (2304042-BS1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Diesel Range Organics (C10-C28) | 258 | 25.0 | 250 | | 103 | 38-132 | | | |
| *Surrogate: n-Nonane* | *52.1* | | *50.0* | | *104* | *50-200* | | | |
| **Matrix Spike (2304042-MS1)** | | | | **Source: E301136-08** | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Diesel Range Organics (C10-C28) | 255 | 25.0 | 250 | ND | 102 | 38-132 | | | |
| *Surrogate: n-Nonane* | *49.9* | | *50.0* | | *99.8* | *50-200* | | | |
| **Matrix Spike Dup (2304042-MSD1)** | | | | **Source: E301136-08** | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Diesel Range Organics (C10-C28) | 259 | 25.0 | 250 | ND | 104 | 38-132 | 1.69 | 20 | |
| *Surrogate: n-Nonane* | *50.7* | | *50.0* | | *101* | *50-200* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | **Reported:** |
| PO Box 247 | Project Number: | 01058-0007 | |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:48:02PM |

## Anions by EPA 300.0/9056A

Analyst: BA

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2304053-BLK1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Chloride | ND | 20.0 | | | | | | | |
| **LCS (2304053-BS1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Chloride | 269 | 20.0 | 250 | | 108 | 90-110 | | | |
| **Matrix Spike (2304053-MS1)** | | | | **Source: E301136-01** | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Chloride | 1150 | 40.0 | 250 | 838 | 123 | 80-120 | | | M2 |
| **Matrix Spike Dup (2304053-MSD1)** | | | | **Source: E301136-01** | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Chloride | 1160 | 40.0 | 250 | 838 | 129 | 80-120 | 1.32 | 20 | M2 |

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

# Definitions and Notes

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 02/01/23 13:48 |

| | |
|---|---|
| M2 | Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| RPD | Relative Percent Difference |
| DNI | Did Not Ignite |

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information | Chain of Custody | Page 1 of 4

| | | |
|---|---|---|
| Client: Pima Environmental Services | Bill To | Lab Use Only |
| Project: Cotton Draw 32 St 2 SWD | Attention: Devon | Lab WO# E301136 |
| Project Manager: Tom Bynum | Address: | Job Number 01053-0007 |
| Address: 5614 N. Lovington Hwy. | City, State, Zip | |
| City, State, Zip Hobbs, NM, 88240 | Phone: | |
| Phone: 580-748-1613 | Email: | |
| Email: tom@pimaoil.com | Pima Project # 1-232 | |
| Report due by: | | |

| TAT | | | | EPA Program | |
|---|---|---|---|---|---|
| 1D | 2D | 3D | Standard | CWA | SDWA |
| | | | X | | |
| | | | | | RCRA |
| | | | | | |

State: NM X | CO | UT | AZ | TX

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | | BGDOC NM | BGDOC TX | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8:00 | 1/25/23 | S | 1 | S1-1' | 1 | | | | | | | | | X | | | | |
| 8:05 | | | | S1-3' | 2 | | | | | | | | | | | | | |
| 8:10 | | | | S1-5' | 3 | | | | | | | | | | | | | |
| 8:15 | | | | S2-1' | 4 | | | | | | | | | | | | | |
| 8:20 | | | | S2-3' | 5 | | | | | | | | | | | | | |
| 8:25 | | | | S2-5' | 6 | | | | | | | | | | | | | |
| 8:30 | | | | S3-1' | 7 | | | | | | | | | | | | | |
| 8:35 | | | | S3-3' | 8 | | | | | | | | | | | | | |
| 8:40 | | | | S3-5' | 9 | | | | | | | | | | | | | |
| 8:45 | | | | S4-1' | 10 | | | | | | | | | | | | | |

Analysis and Method

**Additional Instructions:** Bill to Devon: 2111295?

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Adriana Benavidez

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| | 1-26-23 | 2:00 | Michelle Gaytan | 1-26-23 | 1400 |
| Michelle Gaytan | 1-26-23 | 1645 | Lorenzo Lei | 1-26-23 | 1700 |
| Lorenzo Lei | 1-26-23 | 2320 | Raina Schwanz | 1/27/23 | 8:30 |

Lab Use Only
Received on ice: (Y) / N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

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Project Information | Chain of Custody | Page 2 of 4

| | |
|---|---|
| Client: Pima Environmental Services | Bill To |
| Project: Cotton Draw 32 St 2 SWD | Attention: Devon |
| Project Manager: Tom Bynum | Address: |
| Address: 5614 N. Lovington Hwy. | City, State, Zip |
| City, State, Zip Hobbs, NM, 88240 | Phone: |
| Phone: 580-748-1613 | Email: |
| Email: tom@pimaoil.com | Pima Project # 1-232 |
| Report due by: | |

Lab Use Only: Lab WO# E301136 | Job Number 01058-0007

TAT: 1D | 2D | 3D | Standard X

EPA Program: CWA | SDWA | RCRA

State: NM X | CO | UT | AZ | TX

Analysis and Method: DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | BGDOC NM | BGDOC TX

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Lab Number | BGDOC NM | Remarks |
|---|---|---|---|---|---|---|---|
| 8:50 | 1/25/23 | S | 1 | S4-3' | 1 | X | |
| 8:55 | | | | S4-5' | 2 | | |
| 9:00 | | | | S5-1' | 3 | | |
| 9:05 | | | | S5-3' | 4 | | |
| 9:10 | | | | S5-5' | 5 | | |
| 9:15 | | | | S6-1' | 6 | | |
| 9:20 | | | | S6-3' | 7 | | |
| 9:25 | | | | S6-5' | 8 | | |
| 9:30 | | | | S7-1' | 9 | | |
| 9:35 | | | | S7-3' | 10 | | |

**Additional Instructions:** Bill to Devon: 211295?

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Audriana Benavidez

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| AB | 1-26-22 | 2:00 | Michelle Cruz | 1-26-23 | 1400 |
| Michelle Cruz | 1-26-23 | 1645 | Lorenzo Lee | 1-26-23 | 1700 |
| Lorenzo Lee | 1-26-23 | 2300 | Rana Schuman | 1/27/23 | 8:30 |

Lab Use Only
Received on ice: (Y) / N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: (S) - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other
Container Type: (g) - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

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# Envirotech Analytical Laboratory

Printed: 1/27/2023 11:11:04AM

## Sample Receipt Checklist (SRC)

**Instructions: Please take note of any NO checkmarks.**
**If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.**

| | | | | | |
|---|---|---|---|---|---|
| Client: | Pima Environmental Services-Carlsbad | Date Received: | 01/27/23 08:30 | Work Order ID: | E301136 |
| Phone: | (575) 631-6977 | Date Logged In: | 01/26/23 16:34 | Logged In By: | Caitlin Christian |
| Email: | tom@pimaoil.com | Due Date: | 02/02/23 17:00 (4 day TAT) | | |

**Chain of Custody (COC)**

| | | |
|---|---|---|
| 1. Does the sample ID match the COC? | Yes | |
| 2. Does the number of samples per sampling site location match the COC | Yes | |
| 3. Were samples dropped off by client or carrier? | Yes | Carrier: Courier |
| 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? | Yes | |
| 5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion. | Yes | |

**Sample Turn Around Time (TAT)**

| | | |
|---|---|---|
| 6. Did the COC indicate standard TAT, or Expedited TAT? | Yes | |

**Sample Cooler**

| | | |
|---|---|---|
| 7. Was a sample cooler received? | Yes | |
| 8. If yes, was cooler received in good condition? | Yes | |
| 9. Was the sample(s) received intact, i.e., not broken? | Yes | |
| 10. Were custody/security seals present? | Yes | |
| 11. If yes, were custody/security seals intact? | Yes | |
| 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling | Yes | |
| 13. If no visible ice, record the temperature. Actual sample temperature: 4°C | | |

**Sample Container**

| | | |
|---|---|---|
| 14. Are aqueous VOC samples present? | No | |
| 15. Are VOC samples collected in VOA Vials? | NA | |
| 16. Is the head space less than 6-8 mm (pea sized or less)? | NA | |
| 17. Was a trip blank (TB) included for VOC analyses? | NA | |
| 18. Are non-VOC samples collected in the correct containers? | Yes | |
| 19. Is the appropriate volume/weight or number of sample containers collected? | Yes | |

**Field Label**

| | | |
|---|---|---|
| 20. Were field sample labels filled out with the minimum information: | | |
| Sample ID? | Yes | |
| Date/Time Collected? | Yes | |
| Collectors name? | Yes | |

**Sample Preservation**

| | | |
|---|---|---|
| 21. Does the COC or field labels indicate the samples were preserved? | No | |
| 22. Are sample(s) correctly preserved? | NA | |
| 24. Is lab filteration required and/or requested for dissolved metals? | No | |

**Multiphase Sample Matrix**

| | | |
|---|---|---|
| 26. Does the sample have more than one phase, i.e., multiphase? | No | |
| 27. If yes, does the COC specify which phase(s) is to be analyzed? | NA | |

**Subcontract Laboratory**

| | | |
|---|---|---|
| 28. Are samples required to get sent to a subcontract laboratory? | No | |
| 29. Was a subcontract laboratory specified by the client and if so who? | NA | Subcontract Lab: na |

**Comments/Resolution**

Project Cotton Draw 32 St 2 SWD has been separated into 2 reports due to sample volume. Workorders are as follows: E301136 & E301137.

**Client Instruction**

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

Report to:

Tom Bynum

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

# envirotech

***Practical Solutions for a Better Tomorrow***

## Analytical Report

### Pima Environmental Services-Carlsbad

| | |
|---|---|
| Project Name: | Cotton Draw 32 St 2 SWD |
| Work Order: | E301137 |
| Job Number: | 01058-0007 |
| Received: | 1/27/2023 |

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/1/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.
Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 2/1/23

Tom Bynum
PO Box 247
Plains, TX 79355-0247

Project Name: Cotton Draw 32 St 2 SWD
Workorder: E301137
Date Received: 1/27/2023 8:30:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/27/2023 8:30:00AM, under the Project Name: Cotton Draw 32 St 2 SWD.

The analytical test results summarized in this report with the Project Name: Cotton Draw 32 St 2 SWD apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

**Raina Schwanz**
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

**Alexa Michaels**
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

**Southern New Mexico Area**
**Lynn Jarboe**
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ljarboe@envirotech-inc.com

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**Rayny Hagan**
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

# Table of Contents

# Table of Contents (continued)

# Sample Summary

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | **Reported:** |
| PO Box 247 | Project Number: | 01058-0007 | |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 02/01/23 13:56 |

| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
|---|---|---|---|---|---|
| S8 - 1' | E301137-01A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S8 - 3' | E301137-02A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S8 - 5' | E301137-03A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| SW1 | E301137-04A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| SW2 | E301137-05A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| SW3 | E301137-06A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| SW4 | E301137-07A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| SW5 | E301137-08A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| SW6 | E301137-09A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| SW7 | E301137-10A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| SW8 | E301137-11A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| SW9 | E301137-12A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| SW10 | E301137-13A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| BG1 | E301137-14A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| BG2 | E301137-15A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |
| S7 - 5' | E301137-16A | Soil | 01/25/23 | 01/27/23 | Glass Jar, 4 oz. |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

**S8 - 1'**

**E301137-01**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *89.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *93.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *89.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *93.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *108 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | **1290** | 40.0 | 2 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

**S8 - 3'**

**E301137-02**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *92.2 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *91.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *92.2 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *91.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *107 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

**S8 - 5'**

**E301137-03**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.2 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *92.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.2 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *92.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *108 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | **394** | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## SW1

**E301137-04**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *90.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *91.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *90.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *91.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *108 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## SW2

## E301137-05

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *91.3 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *95.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *91.3 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *95.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *109 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## SW3

## E301137-06

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *89.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *96.6 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *89.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *96.6 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *109 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## SW4

## E301137-07

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *90.0 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *98.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *90.0 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *98.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *102 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *109 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## SW5

**E301137-08**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *90.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *94.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *90.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *94.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *110 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## SW6

### E301137-09

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *94.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *106 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *94.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *94.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *106 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *109 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## SW7

## E301137-10

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *93.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *93.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *106 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *93.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *93.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *106 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *109 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## SW8

### E301137-11

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *92.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *92.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *92.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *92.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *103 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *109 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## SW9

## E301137-12

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *91.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *94.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *91.9 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *94.1 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *112 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

**SW10**

**E301137-13**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *91.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *94.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *91.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *94.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *112 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

**BG1**

**E301137-14**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *93.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *90.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *107 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *93.5 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *90.7 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *107 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *110 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## BG2

## E301137-15

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *92.3 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *92.3 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *92.3 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *92.3 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/28/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: n-Nonane* | | *104 %* | *50-200* | *01/27/23* | *01/28/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# Sample Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

**S7 - 5'**

**E301137-16**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA 8260B** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Benzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Ethylbenzene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| Toluene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| o-Xylene | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| p,m-Xylene | ND | 0.0500 | 1 | 01/27/23 | 01/28/23 | |
| Total Xylenes | ND | 0.0250 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *93.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *95.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2304048 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |
| *Surrogate: Bromofluorobenzene* | | *93.4 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *95.8 %* | *70-130* | *01/27/23* | *01/28/23* | |
| *Surrogate: Toluene-d8* | | *104 %* | *70-130* | *01/27/23* | *01/28/23* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KM | | | Batch: 2304044 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 01/27/23 | 01/27/23 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 01/27/23 | 01/27/23 | |
| *Surrogate: n-Nonane* | | *111 %* | *50-200* | *01/27/23* | *01/27/23* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2304052 |
| Chloride | ND | 20.0 | 1 | 01/27/23 | 01/28/23 | |

# QC Summary Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | **Reported:** |
| PO Box 247 | Project Number: | 01058-0007 | |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## Volatile Organic Compounds by EPA 8260B

Analyst: IY

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2304048-BLK1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/28/23 |
| Benzene | ND | 0.0250 | | | | | | | |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| o-Xylene | ND | 0.0250 | | | | | | | |
| p,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | | | | | | | |
| *Surrogate: Bromofluorobenzene* | *0.469* | | *0.500* | | *93.8* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.466* | | *0.500* | | *93.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.520* | | *0.500* | | *104* | *70-130* | | | |
| **LCS (2304048-BS1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/30/23 |
| Benzene | 2.60 | 0.0250 | 2.50 | | 104 | 70-130 | | | |
| Ethylbenzene | 2.67 | 0.0250 | 2.50 | | 107 | 70-130 | | | |
| Toluene | 2.73 | 0.0250 | 2.50 | | 109 | 70-130 | | | |
| o-Xylene | 2.78 | 0.0250 | 2.50 | | 111 | 70-130 | | | |
| p,m-Xylene | 5.36 | 0.0500 | 5.00 | | 107 | 70-130 | | | |
| Total Xylenes | 8.14 | 0.0250 | 7.50 | | 109 | 70-130 | | | |
| *Surrogate: Bromofluorobenzene* | *0.465* | | *0.500* | | *92.9* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.463* | | *0.500* | | *92.6* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.522* | | *0.500* | | *104* | *70-130* | | | |
| **Matrix Spike (2304048-MS1)** | | | | **Source: E301137-06** | | | | | Prepared: 01/27/23 Analyzed: 01/28/23 |
| Benzene | 2.53 | 0.0250 | 2.50 | ND | 101 | 48-131 | | | |
| Ethylbenzene | 2.55 | 0.0250 | 2.50 | ND | 102 | 45-135 | | | |
| Toluene | 2.62 | 0.0250 | 2.50 | ND | 105 | 48-130 | | | |
| o-Xylene | 2.68 | 0.0250 | 2.50 | ND | 107 | 43-135 | | | |
| p,m-Xylene | 5.16 | 0.0500 | 5.00 | ND | 103 | 43-135 | | | |
| Total Xylenes | 7.84 | 0.0250 | 7.50 | ND | 105 | 43-135 | | | |
| *Surrogate: Bromofluorobenzene* | *0.477* | | *0.500* | | *95.4* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.472* | | *0.500* | | *94.3* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.510* | | *0.500* | | *102* | *70-130* | | | |
| **Matrix Spike Dup (2304048-MSD1)** | | | | **Source: E301137-06** | | | | | Prepared: 01/27/23 Analyzed: 01/28/23 |
| Benzene | 2.41 | 0.0250 | 2.50 | ND | 96.6 | 48-131 | 4.75 | 23 | |
| Ethylbenzene | 2.42 | 0.0250 | 2.50 | ND | 96.8 | 45-135 | 5.37 | 27 | |
| Toluene | 2.47 | 0.0250 | 2.50 | ND | 98.9 | 48-130 | 5.85 | 24 | |
| o-Xylene | 2.54 | 0.0250 | 2.50 | ND | 101 | 43-135 | 5.50 | 27 | |
| p,m-Xylene | 4.89 | 0.0500 | 5.00 | ND | 97.8 | 43-135 | 5.33 | 27 | |
| Total Xylenes | 7.43 | 0.0250 | 7.50 | ND | 99.0 | 43-135 | 5.39 | 27 | |
| *Surrogate: Bromofluorobenzene* | *0.472* | | *0.500* | | *94.3* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.479* | | *0.500* | | *95.8* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.517* | | *0.500* | | *103* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | **Reported:** |
| PO Box 247 | Project Number: | 01058-0007 | |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2304048-BLK1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/28/23 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| *Surrogate: Bromofluorobenzene* | *0.469* | | *0.500* | | *93.8* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.466* | | *0.500* | | *93.2* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.520* | | *0.500* | | *104* | *70-130* | | | |
| **LCS (2304048-BS2)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/28/23 |
| Gasoline Range Organics (C6-C10) | 61.0 | 20.0 | 50.0 | | 122 | 70-130 | | | |
| *Surrogate: Bromofluorobenzene* | *0.460* | | *0.500* | | *92.0* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.479* | | *0.500* | | *95.7* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.518* | | *0.500* | | *104* | *70-130* | | | |
| **Matrix Spike (2304048-MS2)** | | | | **Source: E301137-06** | | | | | Prepared: 01/27/23 Analyzed: 01/30/23 |
| Gasoline Range Organics (C6-C10) | 56.4 | 20.0 | 50.0 | ND | 113 | 70-130 | | | |
| *Surrogate: Bromofluorobenzene* | *0.459* | | *0.500* | | *91.7* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.485* | | *0.500* | | *96.9* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.509* | | *0.500* | | *102* | *70-130* | | | |
| **Matrix Spike Dup (2304048-MSD2)** | | | | **Source: E301137-06** | | | | | Prepared: 01/27/23 Analyzed: 01/28/23 |
| Gasoline Range Organics (C6-C10) | 54.8 | 20.0 | 50.0 | ND | 110 | 70-130 | 2.99 | 20 | |
| *Surrogate: Bromofluorobenzene* | *0.463* | | *0.500* | | *92.5* | *70-130* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *0.457* | | *0.500* | | *91.3* | *70-130* | | | |
| *Surrogate: Toluene-d8* | *0.525* | | *0.500* | | *105* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | **Reported:** |
| PO Box 247 | Project Number: | 01058-0007 | |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: RAS

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2304044-BLK1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| *Surrogate: n-Nonane* | *52.6* | | *50.0* | | *105* | *50-200* | | | |
| **LCS (2304044-BS1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Diesel Range Organics (C10-C28) | 254 | 25.0 | 250 | | 102 | 38-132 | | | |
| *Surrogate: n-Nonane* | *52.5* | | *50.0* | | *105* | *50-200* | | | |
| **Matrix Spike (2304044-MS1)** | | | | **Source: E301137-16** | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Diesel Range Organics (C10-C28) | 258 | 25.0 | 250 | ND | 103 | 38-132 | | | |
| *Surrogate: n-Nonane* | *52.6* | | *50.0* | | *105* | *50-200* | | | |
| **Matrix Spike Dup (2304044-MSD1)** | | | | **Source: E301137-16** | | | | | Prepared: 01/27/23 Analyzed: 01/27/23 |
| Diesel Range Organics (C10-C28) | 259 | 25.0 | 250 | ND | 104 | 38-132 | 0.550 | 20 | |
| *Surrogate: n-Nonane* | *54.5* | | *50.0* | | *109* | *50-200* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | **Reported:** |
| PO Box 247 | Project Number: | 01058-0007 | |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 2/1/2023 1:56:00PM |

## Anions by EPA 300.0/9056A

Analyst: BA

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2304052-BLK1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/28/23 |
| Chloride | ND | 20.0 | | | | | | | |
| **LCS (2304052-BS1)** | | | | | | | | | Prepared: 01/27/23 Analyzed: 01/28/23 |
| Chloride | 254 | 20.0 | 250 | | 102 | 90-110 | | | |
| **Matrix Spike (2304052-MS1)** | | | | **Source: E301137-01** | | | | | Prepared: 01/27/23 Analyzed: 01/28/23 |
| Chloride | 1510 | 40.0 | 250 | 1290 | 87.4 | 80-120 | | | |
| **Matrix Spike Dup (2304052-MSD1)** | | | | **Source: E301137-01** | | | | | Prepared: 01/27/23 Analyzed: 01/28/23 |
| Chloride | 1530 | 40.0 | 250 | 1290 | 94.9 | 80-120 | 1.23 | 20 | |

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

# Definitions and Notes

| | | | |
|---|---|---|---|
| Pima Environmental Services-Carlsbad | Project Name: | Cotton Draw 32 St 2 SWD | |
| PO Box 247 | Project Number: | 01058-0007 | **Reported:** |
| Plains TX, 79355-0247 | Project Manager: | Tom Bynum | 02/01/23 13:56 |

| | |
|---|---|
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| RPD | Relative Percent Difference |
| DNI | Did Not Ignite |

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information | Chain of Custody | Page 3 of 4

| | | | |
|---|---|---|---|
| Client: Pima Environmental Services | Bill To | Lab Use Only | TAT / EPA Program |
| Project: Cotton Draw 32 #2 SWD | Attention: Devon | Lab WO# E301137 | Job Number 01058-0007 |
| Project Manager: Tom Bynum | Address: | 1D 2D 3D Standard: X | CWA SDWA RCRA |
| Address: 5614 N. Lovington Hwy. | City, State, Zip | Analysis and Method | State: NM X, CO, UT, AZ, TX |
| City, State, Zip Hobbs, NM, 88240 | Phone: | | |
| Phone: 580-748-1613 | Email: | | |
| Email: tom@pimaoil.com | Pima Project # 1-232 | | |
| Report due by: | | | |

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | BGDOC NM | BGDOC TX | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9:40 | 1/25/23 | S | 1 | SS-1' | 1 | | | | | | | X | | |
| 9:45 | | | | SS-3' | 2 | | | | | | | | | |
| 9:50 | | | | SS-5' | 3 | | | | | | | | | |
| 9:55 | | | | SW1 | 4 | | | | | | | | | |
| 10:00 | | | | SW2 | 5 | | | | | | | | | |
| 10:05 | | | | SW3 | 6 | | | | | | | | | |
| 10:10 | | | | SW4 | 7 | | | | | | | | | |
| 10:15 | | | | SW5 | 8 | | | | | | | | | |
| 10:20 | | | | SW6 | 9 | | | | | | | | | |
| 10:25 | | | | SW7 | 10 | | | | | | | | | |

**Additional Instructions:** Bill to Devon: 21112957

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Audriana Beranidez

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| AB | 1-26-23 | 2:00 | Michelle Gurule | 1-26-23 | 1400 |
| Michelle Gurule | 1-26-23 | 1645 | Lorenzo Lei | 1-26-23 | 1700 |
| Lorenzo Lei | 1-26-23 | 2300 | Raina Schwanz | 1/27/23 | 8:30 |

Lab Use Only — Received on ice: (Y) / N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

| | | |
|---|---|---|
| Client: Pima Environmental Services | Bill To | Lab Use Only |
| Project: Cotton Draw 32 St 2 SWD | Attention: Devon | Lab WO# E301137 |
| Project Manager: Tom Bynum | Address: | Job Number 01058-0007 |
| Address: 5614 N. Lovington Hwy. | City, State, Zip | |
| City, State, Zip Hobbs, NM, 88240 | Phone: | |
| Phone: 580-748-1613 | Email: | |
| Email: tom@pimaoil.com | Pima Project # 1-232 | |
| Report due by: | | |

| TAT | | | | EPA Program | |
|---|---|---|---|---|---|
| 1D | 2D | 3D | Standard | CWA | SDWA |
| | | | X | | |
| | | | | | RCRA |
| | | | | | |

State: NM X | CO | UT | AZ | TX

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | | BGDOC NM | BGDOC TX | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10:30 | 1/25/23 | S | 1 | SW8 | 11 | | | | | | | | | X | | | | |
| 10:35 | " | " | " | SW9 | 12 | | | | | | | | | " | | | | |
| 10:40 | " | " | " | SW10 | 13 | | | | | | | | | " | | | | |
| 10:45 | " | " | " | BG1 | 14 | | | | | | | | | " | | | | |
| 10:50 | " | " | " | BG2 | 15 | | | | | | | | | " | | | | |
| 10:55 | " | " | " | S7-5' | 16 | | | | | | | | | " | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

**Additional Instructions:** Bill to Devon: 21112957

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Audriana Benavidez

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| AB | 1-26-23 | 2:00 | Michelle Cuevas | 1-26-23 | 1400 |
| Michelle Cuevas | 1-26-23 | 1645 | Lorenzo Lei | 1-26-23 | 1700 |
| Lorenzo Lei | 1-26-23 | 2300 | Rene Schwy | 1/27/23 | 8:30 |

Lab Use Only
Received on ice: Y / N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

# Envirotech Analytical Laboratory

Printed: 1/27/2023 11:22:28AM

## Sample Receipt Checklist (SRC)

**Instructions: Please take note of any NO checkmarks.**
**If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.**

| | | | | | |
|---|---|---|---|---|---|
| Client: | Pima Environmental Services-Carlsbad | Date Received: | 01/27/23 08:30 | Work Order ID: | E301137 |
| Phone: | (575) 631-6977 | Date Logged In: | 01/26/23 16:35 | Logged In By: | Caitlin Christian |
| Email: | tom@pimaoil.com | Due Date: | 02/02/23 17:00 (4 day TAT) | | |

**Chain of Custody (COC)**

| | | |
|---|---|---|
| 1. Does the sample ID match the COC? | Yes | |
| 2. Does the number of samples per sampling site location match the COC | Yes | |
| 3. Were samples dropped off by client or carrier? | Yes | Carrier: Courier |
| 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? | Yes | |
| 5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion. | Yes | |

**Sample Turn Around Time (TAT)**

| | | |
|---|---|---|
| 6. Did the COC indicate standard TAT, or Expedited TAT? | Yes | |

**Sample Cooler**

| | | |
|---|---|---|
| 7. Was a sample cooler received? | Yes | |
| 8. If yes, was cooler received in good condition? | Yes | |
| 9. Was the sample(s) received intact, i.e., not broken? | Yes | |
| 10. Were custody/security seals present? | No | |
| 11. If yes, were custody/security seals intact? | NA | |
| 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling | Yes | |
| 13. If no visible ice, record the temperature. Actual sample temperature: 4°C | | |

**Sample Container**

| | | |
|---|---|---|
| 14. Are aqueous VOC samples present? | No | |
| 15. Are VOC samples collected in VOA Vials? | NA | |
| 16. Is the head space less than 6-8 mm (pea sized or less)? | NA | |
| 17. Was a trip blank (TB) included for VOC analyses? | NA | |
| 18. Are non-VOC samples collected in the correct containers? | Yes | |
| 19. Is the appropriate volume/weight or number of sample containers collected? | Yes | |

**Field Label**

| | | |
|---|---|---|
| 20. Were field sample labels filled out with the minimum information: | | |
| Sample ID? | Yes | |
| Date/Time Collected? | Yes | |
| Collectors name? | Yes | |

**Sample Preservation**

| | | |
|---|---|---|
| 21. Does the COC or field labels indicate the samples were preserved? | No | |
| 22. Are sample(s) correctly preserved? | NA | |
| 24. Is lab filteration required and/or requested for dissolved metals? | No | |

**Multiphase Sample Matrix**

| | | |
|---|---|---|
| 26. Does the sample have more than one phase, i.e., multiphase? | No | |
| 27. If yes, does the COC specify which phase(s) is to be analyzed? | NA | |

**Subcontract Laboratory**

| | | |
|---|---|---|
| 28. Are samples required to get sent to a subcontract laboratory? | No | |
| 29. Was a subcontract laboratory specified by the client and if so who? | NA | Subcontract Lab: na |

**Comments/Resolution**

Project Cotton Draw 32 St 2 SWD has been separated into 2 reports due to sample volume. Workorders are as follows: E301136 & E301137.

**Client Instruction**

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

**District I**
1625 N. French Dr., Hobbs, NM 88240
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**District II**
811 S. First St., Artesia, NM 88210
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**District III**
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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

QUESTIONS

Action 378099

## QUESTIONS

| | |
|---|---|
| Operator:<br>DEVON ENERGY PRODUCTION COMPANY, LP<br>333 West Sheridan Ave.<br>Oklahoma City, OK 73102 | OGRID:<br>6137 |
| | Action Number:<br>378099 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

| **Prerequisites** | |
|---|---|
| Incident ID (n#) | **nOY1803741279** |
| Incident Name | **NOY1803741279 COTTON DRAW 32 STATE SWD #002 @ 30-025-41524** |
| Incident Type | **Produced Water Release** |
| Incident Status | **Remediation Closure Report Received** |
| Incident Well | **[30-025-41524] COTTON DRAW 32 STATE SWD #002** |

| **Location of Release Source** | |
|---|---|
| *Please answer all the questions in this group.* | |
| Site Name | COTTON DRAW 32 STATE SWD #002 |
| Date Release Discovered | 01/21/2018 |
| Surface Owner | Federal |

| **Incident Details** | |
|---|---|
| *Please answer all the questions in this group.* | |
| Incident Type | Produced Water Release |
| Did this release result in a fire or is the result of a fire | No |
| Did this release result in any injuries | No |
| Has this release reached or does it have a reasonable probability of reaching a watercourse | No |
| Has this release endangered or does it have a reasonable probability of endangering public health | No |
| Has this release substantially damaged or will it substantially damage property or the environment | No |
| Is this release of a volume that is or may with reasonable probability be detrimental to fresh water | No |

| **Nature and Volume of Release** | |
|---|---|
| *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.* | |
| Crude Oil Released (bbls) Details | *Not answered.* |
| Produced Water Released (bbls) Details | Cause: Other \| Other (Specify) \| Produced Water \| Released: 519 BBL \| Recovered: 512 BBL \| Lost: 7 BBL. |
| Is the concentration of chloride in the produced water >10,000 mg/l | Yes |
| Condensate Released (bbls) Details | *Not answered.* |
| Natural Gas Vented (Mcf) Details | *Not answered.* |
| Natural Gas Flared (Mcf) Details | *Not answered.* |
| Other Released Details | *Not answered.* |
| Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts) | *Not answered.* |

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



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>DEVON ENERGY PRODUCTION COMPANY, LP<br>333 West Sheridan Ave.<br>Oklahoma City, OK 73102 | OGRID:<br>6137 |
| | Action Number:<br>378099 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

| **Nature and Volume of Release (continued)** | |
|---|---|
| Is this a gas only submission (i.e. only significant Mcf values reported) | **No, according to supplied volumes this does not appear to be a "gas only" report.** |
| Was this a major release as defined by Subsection A of 19.15.29.7 NMAC | **Yes** |
| Reasons why this would be considered a submission for a notification of a major release | **From paragraph A. "Major release" determine using:**<br>**(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.** |
| *With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.* | |

| **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 | True |
| The impacted area has been secured to protect human health and the environment | True |
| Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices | True |
| All free liquids and recoverable materials have been removed and managed appropriately | True |
| If all the actions described above have not been undertaken, explain why | *Not answered.* |
| *Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.* | |

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.

| | |
|---|---|
| I hereby agree and sign off to the above statement | Name: Dale Woodall<br>Title: EHS Professional<br>Email: Dale.Woodall@dvn.com<br>Date: 08/27/2024 |

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



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>DEVON ENERGY PRODUCTION COMPANY, LP<br>333 West Sheridan Ave.<br>Oklahoma City, OK 73102 | OGRID:<br>6137 |
| | Action Number:<br>378099 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

| **Site Characterization** | |
|---|---|
| *Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs) | Between 100 and 500 (ft.) |
| What method was used to determine the depth to ground water | NM OSE iWaters Database Search |
| Did this release impact groundwater or surface water | No |
| **What is the minimum distance, between the closest lateral extents of the release and the following surface areas:** | |
| A continuously flowing watercourse or any other significant watercourse | Greater than 5 (mi.) |
| Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) | Greater than 5 (mi.) |
| An occupied permanent residence, school, hospital, institution, or church | Greater than 5 (mi.) |
| A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes | Greater than 5 (mi.) |
| Any other fresh water well or spring | Greater than 5 (mi.) |
| Incorporated municipal boundaries or a defined municipal fresh water well field | Greater than 5 (mi.) |
| A wetland | Between 1 and 5 (mi.) |
| A subsurface mine | Greater than 5 (mi.) |
| An (non-karst) unstable area | Greater than 5 (mi.) |
| Categorize the risk of this well / site being in a karst geology | Low |
| A 100-year floodplain | Greater than 5 (mi.) |
| Did the release impact areas not on an exploration, development, production, or storage site | No |

| **Remediation Plan** | |
|---|---|
| *Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| Requesting a remediation plan approval with this submission | Yes |
| *Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.* | |
| Have the lateral and vertical extents of contamination been fully delineated | Yes |
| Was this release entirely contained within a lined containment area | No |
| **Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.) | |
| Chloride (EPA 300.0 or SM4500 Cl B) | 1290 |
| TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M) | 0 |
| GRO+DRO (EPA SW-846 Method 8015M) | 0 |
| BTEX (EPA SW-846 Method 8021B or 8260B) | 0 |
| Benzene (EPA SW-846 Method 8021B or 8260B) | 0 |
| | |
| *Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.* | |
| On what estimated date will the remediation commence | 06/24/2024 |
| On what date will (or did) the final sampling or liner inspection occur | 06/30/2024 |
| On what date will (or was) the remediation complete(d) | 06/30/2024 |
| What is the estimated surface area (in square feet) that will be reclaimed | 2224 |
| What is the estimated volume (in cubic yards) that will be reclaimed | 140 |
| What is the estimated surface area (in square feet) that will be remediated | 2224 |
| What is the estimated volume (in cubic yards) that will be remediated | 140 |
| *These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.* | |
| *The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.* | |

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# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
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# Santa Fe, NM 87505



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>DEVON ENERGY PRODUCTION COMPANY, LP<br>333 West Sheridan Ave.<br>Oklahoma City, OK 73102 | OGRID:<br>6137 |
| | Action Number:<br>378099 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

| | |
|---|---|
| **Remediation Plan (continued)** | |
| *Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| **This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:** | |
| *(Select all answers below that apply.)* | |
| (Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.) | Yes |
| Which OCD approved facility will be used for **off-site** disposal | R360 ARTESIA LLC LANDFARM [fEEM0112340644] |
| **OR** which OCD approved well (API) will be used for **off-site** disposal | *Not answered.* |
| **OR** is the **off-site** disposal site, to be used, out-of-state | *Not answered.* |
| **OR** is the **off-site** disposal site, to be used, an NMED facility | *Not answered.* |
| (Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms) | *Not answered.* |
| (In Situ) Soil Vapor Extraction | *Not answered.* |
| (In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.) | *Not answered.* |
| (In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.) | *Not answered.* |
| (In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.) | *Not answered.* |
| Ground Water Abatement pursuant to 19.15.30 NMAC | *Not answered.* |
| OTHER (Non-listed remedial process) | *Not answered.* |
| *Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.* | |
| | |
| 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. | |
| I hereby agree and sign off to the above statement | Name: Dale Woodall<br>Title: EHS Professional<br>Email: Dale.Woodall@dvn.com<br>Date: 08/27/2024 |
| *The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.* | |

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## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>DEVON ENERGY PRODUCTION COMPANY, LP<br>333 West Sheridan Ave.<br>Oklahoma City, OK 73102 | OGRID:<br>6137 |
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**QUESTIONS**

| **Deferral Requests Only**<br>*Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.* | |
|---|---|
| Requesting a deferral of the remediation closure due date with the approval of this submission | No |

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## QUESTIONS (continued)

| | |
|---|---|
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**QUESTIONS**

| **Sampling Event Information** | |
|---|---|
| Last sampling notification (C-141N) recorded | **363300** |
| Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC | **07/15/2024** |
| What was the (estimated) number of samples that were to be gathered | **31** |
| What was the sampling surface area in square feet | **2244** |

| **Remediation Closure Request** | |
|---|---|
| *Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.* | |
| Requesting a remediation closure approval with this submission | Yes |
| Have the lateral and vertical extents of contamination been fully delineated | **Yes** |
| Was this release entirely contained within a lined containment area | **No** |
| All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion | Yes |
| What was the total surface area (in square feet) remediated | 2224 |
| What was the total volume (cubic yards) remediated | 140 |
| All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene | Yes |
| What was the total surface area (in square feet) reclaimed | 2224 |
| What was the total volume (in cubic yards) reclaimed | 140 |
| Summarize any additional remediation activities not included by answers (above) | The liner inspection is included in the closure report |

*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 (in .pdf format) 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.*

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.

| | |
|---|---|
| I hereby agree and sign off to the above statement | Name: Dale Woodall<br>Title: EHS Professional<br>Email: Dale.Woodall@dvn.com<br>Date: 08/27/2024 |

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## QUESTIONS (continued)

| | |
|---|---|
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**QUESTIONS**

| **Reclamation Report** | |
|---|---|
| *Only answer the questions in this group if all reclamation steps have been completed.* | |
| Requesting a reclamation approval with this submission | No |

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CONDITIONS

Action 378099

## CONDITIONS

| Operator: | OGRID: |
|---|---|
| DEVON ENERGY PRODUCTION COMPANY, LP<br>333 West Sheridan Ave.<br>Oklahoma City, OK 73102 | 6137 |
| | Action Number:<br>378099 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| amaxwell | Remediation closure approved. | 9/4/2024 |
| amaxwell | A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable. | 9/4/2024 |
| amaxwell | The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan. | 9/4/2024 |